us-10-005-907-1.rge

GAGTITGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC GAGTITGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC GAAAGTITCACATTGACCTGTGATGCACATCAGAAAGCAGAAGTGTCAC GAAAGTITCACATGTTAAGCTGGTGATGCAGTCATCAGCCAG AAAGTTTCACATGTTAAGCTGGTGATCAGCCAGTTCATGCCAG AAGCCTACACACACATTAAAGCTTGACCAGTTTTGAGC AAGCCTACATTCAAAATTATAAAAATTACCAGGTGT AAGCCTCGTTCTTCAAAATAATTAAAAAATTGCCAGGTGT AAGCCTCGTTCTTCAAAATAATTAAAAAATTGCCAGGTGT AAGCCTCGTTCTTCAAAATAATTAAAAAATTGCCAGGTGT AAGCCTCGTTCTTCAAAAAAATTAAAAAATTGGCAGGTGT AAGCCTCGTTCTTCAAAAAAATTAAAAAATTGGCAGTGTTTGAG AACTGAGCCAGGATCTTGCCCACCACA 1126 AACTGAGCCAGGATCTTGCCACCACA 2560 AACTGAGCCAGGATCTTGCCACCACA 1126 AACTGAGCCAGGATCTTGCCACCACA 1126 AACTGAGCCAGGATCTTGCCACCACA 1126 AACTGAGCCAGGATCTTGCCACCACA 1126 AACTGAGCCAGGATCTTGCCACCACA 1126 AACTGAGCCAGGATCTTGCCACCACA 1126 AACTGAGCCAGGATCTTGCCACACATTTCAGGATAATAAAAAAAA	0 4 0 4	0 1 0 1	3 1 3 1	
2211 2277 2277 233 233 233 233 245 245 245 245 245 245 245 245 245 245	2118 TAATTTTATGCCTGAACAGGGTTTGCGCACATTGGACCATCAGAAACCAGAAGTGTCACAGAATGTCACAGAAGCAGAAGTGTCACAGAAGTGTCACAGAAGTGTCACAGAGCATTGGACCATCAGAAAGCAGAAGTGTCACAGAGTTTGCGCACATTGGACCATCAGAAAGCTGAAAAGTTTCAGATGTAAGCTGGTGATGAAGGTTCATGCAGAGTTAAGCTGGTGATGATCATCAGAGCTGATGTAAAGCTGATGATAAGCTGATGATGATCATCAGCAGAGTTAAAGCTGATGATAAGCTGATGATCATCAGCAGAGTTAAAGCTGATAAAGCTCATCATGCAGAGCTGATTCATGCAGAGCTGATCATGCAGAGCTGATAAAGCTTCATGCCAGAGCTGATTAAACTGAAAGTTTCAAGATGTTAAAGCTGGTGAATCATGCCAGGCCAAGAGCTTCATGCCAGAGCCAGAGCCAGAGCCAGAGCCAGAGCTAAAAGCTTCAAGATTTCAAGATGTTAAAGCTGGATGATCATGCCAGGCCAGAGCCAGAGCCAGAGCCAGAGCCAGAGCCAGAGCTAAAAGCTTCAAAAAGTTTCAAGATGTTAAAGCTGCAAGTCCAAGAAAAGTTTCAAGATGTTAAAGCTGGCAGTCAAAAAGTTTCAAGATGTTAAAGCTGGCAGTCAAAAAGTTTCAAGATGTTAAAGCTGCAAGAACCAGAGCCAAAAAAGATTTCAAGATGTTAAAGCTGCAAGAAAAAGATTTCAAGATGTTAAAGCTGCAAGAAAAGATTTCAAGATGTTAAAGCTGCAAGAAAAAGATTTCAAGATGTTAAAGCTGCAAGAAAAAGATTTCAAGATGTTAAAGCTGCAAGAAAAGATTTCAAGATGTTAAAGCTGCAAGAAAAAGATTTCAAGATGTTAAAGCTGGATGATAAAAGATTTCAAGATGTTAAAGCTGAAAAAGATTTCAAGATGTTAAAGCTGAAAAAGATTTCAAGATGTTAAAGCTGAAAAAGATTTCAAAAAAGATTTCAAGATGTTAAAAGATTCAAAAAAGATTTCAAGATGTTAAAAGATTCAAAAAAAA		2458 GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG 251 1023 GGTGGTGCACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGTTTTTGAG 108 2517 ACTGGGAGGTTGAGGTGAACTCAGGATCTTGCCACCACA 2560 1083 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560 1083 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126	CQ494252 Sequence 26119 from Patent W00160860. Sequence 26119 from Patent W00160860. CQ494252. CQ494252. GI:41459871 Homo sapiens (human)  Schlegel, R., Endege, W.O. and Monahan, J.E. Genes differentially expressed in human prostate cancer and the use Ucation/Qualifiers  Loation/Qualifiers  Loation/Qualifiers  Loation/Qualifiers  Loation/Qualifiers  Angel wassigned bNa"  Able xref="taxon:9606" Mol type="unassigned bNa"  Adle xref="taxon:9606" Mol type="unassigned bNa"  A CTACAAATTTCAAATGCAACATCTGCCCAACCAA-TATCATTTCATT

```
2397
                                                                                                                                                                      2457
                                                                                                                                                                                     2516
                                                                                                                                                                                            1082
                                                                                          2157
                                                                                                         2217
                                                                                                                        2277
                                                                                                                                       2337
              1857
                             1917
                                             1977
                                                           2037
                                                                           2097
1797
                                                    542
                                                                   602
                                                                                  662
                                                                                                 722
                                                                                                                 782
                                                                                                                                842
                                                                                                                                               902
                                                                                                                                                              962
                      422
                                     482
      362
                                                           TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                           CCCAAGAAGTITITIAAIGATAIGCCAGCITCCTAAITIGGAGACAAAAGCCTTAAITGA
                                                                           ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTGGATTTTGGAATA
                                                                               ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                        ACTGGGAGGTTGAGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                    ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA
                                                                                                                                783
                                                                                                                                                                                              1023
                                                                                                                         2218
                                                                                                                                                                                      2458
                                                                                                                                                                                                     2517
                                                                                                                                                                                                            1083
                                                                                                                                         2278
                                                                                                                                                        2338
                                                                                                                                                                       2398
                                                                                           2098
                                                                                                          2158
 1738
        303
               1798
                       363
                               1858
                                      423
                                              1918
                                                     483
                                                             1978
                                                                    543
                                                                            2038
                                                                                   603
                                                                                                   663
                                                                                                                  723
                                                                                                                                                843
                                                                                                                                                               903
                                                                                                                                                                              963
8 4 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6
                                                                                                                                                     8 B 8 B 8
                                                                                                                                                                                           8 8
```

completed: November 18, 2004, 18:25:07 he : 15382 secs Search cor Job time

qq	123 AATTTTTCTTTTTCTAIGIACIGGATAITTTTGCAIAIAAACTIGCAGIAATAGITCAAA 182	KEYWORDS Homo ganjeng (him
රු සි	1618 AATTAATAGTITTTGACATTGGCTTTTCTGAGAAGAGAATTGAAAGTGTCACAAAATAA 1677 	Σ
<i>7</i> €	1678 AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA 1737 	REFERENCE 1 AUTHORS Schlegel, R., Ende TITLE Genes differentia
oy Oy	1738 AICGAAGGAITCIGIICAAATAITAGTAAAAAITGAAAATAAACIIGIGCIIAIAIIIIG 1797 	JOURNAL Patent: WO 016086 Millennium Predic FEATURES Location Source 11128
oy D	1798 ITTGCAACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT 1857 	
Qy	1858 AGTITCTGGTTTTAAAATTCAAGCAAACTGGAAAATAATCCATCTAATTATGCTTTCTTT	Query Match Best Local Similarity 98. Matches 1102; Conservative
oy qa	1918 CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA 1977 	Oy 1438 CCAAATTTCAAATGC
oy Oy	1978 CAATGCATTCATTATATATTTTTTGTATAGTTACAGTATACGAGTTGAGTATCCCTTAG 2037 	1498
oy GB	2038 AIGAGAIGCTIGGGACCAGAAGIGTITIGGAITITCAGAITIAITAITITIGGAIA 2097 	Oy 1558 AATTITCTTITTTTTTTTTTTTTTTTTTTTTTTTTTTTT
Qy	2098 ITTCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC 2157 	Qy 1618 AATTAATAGTTTTTG 
λ O	2158 TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGTAATTTTATACAATATTTTAAA 2217 	Oy 1678 AAAAAGATGAAATGA 
δ, dg	2218 TAATTITATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC 2277 	Oy 1738 ATCGAAGGATTCTGT
o O	2278 TATTICAAGICAGIGCICAAAAAGITICAGAIGITAAGCIGGIGAIGCAGIICAIGCAG 2337 	Oy 1798 TTTGCAACACACTAG 
çy qq	2338 TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC 2397 	Oy 1858 AGTTTCTGGTTTTTAA 
oy Db	2398 CAGACTGCACAACACGGGAGACCTCGTTTCTACAAATAAAAAATTAGACAGGTGT 2457 	OY 1918 CCCAAGAAGTTTTTD 
ò a	2458 GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTGAG 2516	Oy 1978 CAATGCATTCATTATY
් රි සි	2517 ACTGGGAGGTTGAGGCTGAGGCGAGGATCTTGCCACCACA 2560	2038 ATGACATGCTTGGGAC
		2098

1497 2 1557 1617 1677 1737 1797 1857 1917 1977 2037 2097 2098 TITCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC 2157 122 182 242 302 362 422 482 722 542 602 lege, W.O. and Monahan, J.E. tally expressed in human prostate cancer and their 62 oa, Chordata, Craniata, Vertebrata; Buteleostomi; ia, Primates, Catarrhini, Hominidae, Homo. GTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC GCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT TATGTACTGGATATTTTGCATATAAACTTGCAGTAATAGTTCAAA TTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTG TTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG GIGTAAGACCAGIGACCAGACCCTTIGCTAACCTGACATTTACTTC TATGTACTGGATATTTTGCATATAAACTTGCAGTAATAGTTCAAA TATATTTTTTTGTATAGTTACAGTATACGAGTTGAGTATCCCTTAG Gaps 5 Length 1128; Indels 1.4%; Score 1068; DB 6; 1.0%; Pred. No. 1.2e-176; re 0; Mismatches 20; 660-A 20797 23-AUG-2001; ctive Medicine, Inc. (US) .sm="Homo sapiens" pe="unassigned DNA" :f="taxon:9606" man) 2158 ò g දු පු

723

PAT 30-JAN-2004

linear

1128 bp DNA Sequence 20797 from Patent W00160860. CQ488930 CQ488930.1 GI:41454549

RESULT 14 CQ488930 LOCUS DEFINITION ACCESSION VERSION

us-10-005-907-1.rge

603 AIGAGAIGCITGGGACCAGAAGIGITITGGATITCAGAITIAITITIGGAITTIGGAAIA 66	Oy 2098 TTTCCATACATATATGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC 2157	OY 2338 TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC 2397	Qy         2458 GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTCAG 2516           Db         1023 GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGTTATTGGATTGTTTGAG 1082           Qy         2517 ACTGGAGGTTGAGGCTGAGCTGAGGTTCTTGCCACCACA 2560           Db         1083 ACTGGGAGGTTGAGGCTGAACTGAGGCAGGATCTTGCCACCACA 1126	linear E extebrata, E	heria; Primates; Catarrhini; Hominidae; Homo. Endege,W.O. and Monahan,J.E. ntially expressed in human prostate cancer and thei: 60860-A 20608 23-AUG-2001; edictive Medicine, Inc. (US) 11.28 anism="Homo sapiens" type="unassigned DNA" kref="taxon:9606"	Query Match 28.4%; Score 1068; DB 6; Length 1128; Best Local Similarity 98.0%; Pred. No. 1.2e-176; Matches 1102; Conservative 0; Mismatches 20; Indels 2; Gaps 2;	Qy 1438 CCAAATTCAAATGCCAACATCCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT 1497	Qy 1498 CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC 1557	Qy 1558 AATTITCTITTCTAGGATATTTTGCATATAAACTTGCAGTAATAGTTCAAA 1617
Db 1083 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126	RESULT 12 CQ488563 LOCUS DEFINITION Sequence 20430 from Patent W00160860. ACCESSION CQ488563.1 GI:41454182 SOURCE SOURCE Homo sapiens (human) ORGANISM Homo sapiens (human) ORGANISM Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. AUTHORS Schlegel, R., Endege, W.O. and Monahan, J.B. TITLE Genes differentially expressed in human prostate cancer and their	use JOURNAL Patent: WO 0160860-A 20430 23-AUG-2001; Milennium Predictive Medicine, Inc. (US) Location/Qualifiers 1. 11.28 /organism="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606"	Query Match 28.4%; Score 1068; DB 6; Length 1128; Best Local Similarity 98.0%; Pred. No. 1.2e-176; Matches 1102; Conservative 0; Mismatches 20; Indels 2; Gaps 2; Qy 1438 CCAAATTTCAAATGCCAACATCTCCCCATTACCTATTTCAACTTTTGAGGTGTAAT 1497 Db 4 CTACAAATTTAAATGCAACATCTGCCATCCAA-TACCTATTTCACTTTTGAGGGGTAAT 62	1498 CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC  [	Db   183 AATTAATAGTTITTGACATTGCTATTCTGAGAAGAGAAATTGAAATTAA 242     1678 AAAAAGATGAAATGACATTGCCAATTTCTCAATTTCTAGTCACAAATAA 242     1678 AAAAAGATGAAAGCATATATAATTGTCAATTTTTCAATTTTCTAGCCAACAGA 1737     1738 ATCGAAGATTCTGTTCAATATTATAATTGTAAAATTAAATTTTTCAATTTTTTT     173	1858	1918 CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA	OY 1978 CAAIGCATTCATTATATATTTTTTGPATAGTTACGAGTTGAGTATCCCTTAG 2037	Qy 2038 atgagatgettgggaccagaagtgttttggatttcagatttttggatttttggattttggatta 2097

	OY 1618 AATTAATAGTTTTTGACATTGGCTTTTCTGAGAAGAGAA	OY 1738 AICGAAGGATICTGTICAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG 1797  Db 303 AICGAAGGATTCTGTICAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG 362  OY 1798 TITGCAACACATAATTAAACTGTGACTAGTTATCTCTACCGAAGGTGGATGTT 1857	1858 AGTTTCTGGTTTTAAAATTCAAGGAAACTGGAAAATAATCCATCTAATTATGCTTTCTTT	Db 483 CCCAAGAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA OY 1978 CAATGCATTCATATAATTTTTTTTTTAAAGGTTAAGTATCCCTTAG 2037  Db 543 CAATGCATTCATATAATTTTTTTTTTTAAGAGTTAAGGAGTAGGATACCCTTAG 602	2038 AIGAGAIGCTIGGGACCAGAAGIGITTIGGAITICAGAITIATITITIGGAITITIGGAAIA	Oy         2098         TITCCAIRANTALANGAGAGAGAGAGAAANGGGATCAAACTAAATCACATAAATCAC 2157           Db         663         TITCCAIRATAATGAGAGAGTTGGTAAATGGGATCAACTAATCATCATAAGATGCAC 722           Qy         2158         TIATGTTTGATATACACCTTATCTGAATAGCTGAAGGTAATTTTATACAATATTTTAAA 2217           Db         723         TIATGTTTGATATACACCTTATCTGAATAGCTGAAGGTAATTTTATACAATATTTTAAA 782           Db         723         TIATGTTTGATAACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTAAA 782	Oy 2218 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAGTGAAGTCAC 2277  Db 783 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAGTGTCAC 842  Qy 2278 TAATTTTATGCCTGAAAAGTTTCAGATGTTGAGCGGTTGGTGCAC 842  Db 843 TATTCAAGTCCTCAAAAGTTTCAGATGTTAAGCTGGTGTGCAG 2337  Db 843 TATTCAAGTCACTCAAAAGTTTCAGATGTTAAGCTGGTGATGAGCCAG	Oy 2338 IGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGCC 2397	QY         2458         GGTGGTGCACCCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG         2516           Db         1023         GGTGGTGCACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG         1082           QY         2517         ACTGGGAGGTTGAGGCTGAACTGAGGTTTGCCACCACA         2560
	1357 TATTTACAGAATTTGGGTTACCAATAAGTCTCCACAAATATATGTCCAAGAAT 1416	1477 ATTTCATCTTTGAGGTGTAATCTACTCAATAAACTGTGTAAGACCAGGACCCTT 1536 1601 ATTTCATTTTGAGGTGTAATCCACTCAATAAACTGTATAAGACCAGTGACCAGACCCTT 1660 1537 TGCTAACCTGACATTTACATTTTTCTTTTTTTTTGAGATATTTTGCATATA 1596	AACTIGCAGTAATAGTICAAAAATTAATAGTITTIGACATIGGCTTTICTGAGAAGAAAAAAAAAA	1780 ATTGALFITITITAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	1774 AAATAAA 1780               1900 AAAAAA 1906	RESULT 11 CQ488422 LOCUS CQ488422 LOCUS CQ488422 ACESSION CQ48842 ACESSION CQ48842 G1:41454041	ORGANISM Homo sapiens (human) ORGANISM Homo sapiens ORGANISM Homo sapiens Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE AUTHORS Schlegel, R., Endege, W.O. and Monahan, J.E. TITLE Genes differentially expressed in human prostate cancer and their	NAL ES ource	ORIGIN  Query Match  Query Match  Best Local Similarity 98.0%; Pred. No. 1.2e-176;  Matches 1102; Conservative 0; Mismatches 20; Indels 2; Gaps 2;  Qy 1438 CCAAATITCAAATGCCAACATTCCCCATCCCATTACTTTTCATCTTTGAGGTGTAAT 1497

```
1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACTGACTICTTAAGICTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGAA 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTACATAACAGAGCCTTGGTTTCCACACCCCTTTATTTTAGCTAAAGCATTCTTTT 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1177 AGCIGAACCGAIGIGCACTITCCAITIAAIGAITITAIGITTIGCITGIAACTCCIGICT 1236
                                                 216
                                                                                                  276
                                                                                                                                                                                                                                                                                                                                                     576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          966
                        283
                                                                          343
                                                                                                                          403
                                                                                                                                                  AATGATGATGGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAA 336
                                                                                                                                                                          404 AATGATGATGGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGAATTTAGAGAA 463
                                                                                                                                                                                                  AGGICAGAGACAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACC 396
                                                                                                                                                                                                                           523
                                                                                                                                                                                                                                                    456
                                                                                                                                                                                                                                                                             583
                                                                                                                                                                                                                                                                                                     516
                                                                                                                                                                                                                                                                                                                    703
                                                                                                                                                                                                                                                                                                                                                                                                                              760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              881 GGACCCCCTTCTGGGCCAAGGACCTCAGATGATCTTGAAAGACTGAATTCTGGCCATG 940
                                                                                                                                                                                                                                                                                                                                                                                                    CAACTCTGATATGTGGCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACAATGAC 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAAAATATTCTATGTGTTTTTGCTTGTAAAGTTTTGAGGACATGGAGGTGATAAAAAAA 696
              GCATGAAACATTCCTTTCTGGCTAAAGTTTAGAAATATTATCTTATTATATCCTTAGG
                                                                                                GAAGAAGTGTGCTACACTGTCATTAATCACACTCCCCATCAGAGATCCTCCTGAGCTCC
                                                                                                                GAAGAAGTGTGCTACACTGTCATTAATCACATCCCCCATCGGAGGTCTTCCCTGAGCTCC
                                                                                                                                                                                                                          464 AGGICAGAGAATATACCCCTICTTAGGACTICTGTTAGTAGGCCTTATTCTTGCACC
                                                                                                                                                                                                                                                                CATGAGCATGATTACGAAGTTGTGTTCCACACTAAAACCCTCAAGCCGCTTTATCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTAAAATATTCTATGTGTTTTTTGCTTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                         CAACTCTGAAATGTGGCATCTCTGTGGTTTAGGTGGAATCATAGAAATTGAAACAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       817 ATAGGAAGGAGGTGAGACACACCTTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACTGACTTCTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAACTITGAAICTACTAIGACCIGIAAGCICICCTCCTCCTICAAGAICIIGCCICITIA
AAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCT
                                                                                                                                                                                                                                                   CATGAGCATGATTATGAAGTTGTGTTTCCACACTAAAATCCTCAAGCTGCTTTATCACCT
                                                                                                                                                                                                                                                                                                   TCCAGCAATGAAGACAATGCAGAATAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTCTTAGGACAATAAATGTAAAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               821 CTTTCTTAGGACAATAATGTAAAATGAAAATAAATTCCTAATCCCCCTGACTAACTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGACCCTCTTCTAGGCCAAAGAGACCTCAGATGAACCTGAAAGACTGAATTCTGGCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGACCAGGATGAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TICCAACCTGACTCTGGTGTAGATCACACCTGTCTGAGGGATTCCATCTATGAGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GICTATGTAACAAGACCTTGGTTTCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1241 AATATTTGAATCTACCTATGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTA
                                                                                                                                                                                                 337
97
                        224
                                                157
                                                                         284
                                                                                                217
                                                                                                                         344
                                                                                                                                                 277
                                                                                                                                                                                                                                                   397
                                                                                                                                                                                                                                                                          524
                                                                                                                                                                                                                                                                                                   457
                                                                                                                                                                                                                                                                                                                            584
                                                                                                                                                                                                                                                                                                                                                  517
                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                    577
                                                                                                                                                                                                                                                                                                                                                                                                                             704
                                                                                                                                                                                                                                                                                                                                                                                                                                                      637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1117
                                                                                                                                                                                                                  원
B &
                                       à
                                                                 g
                                                                                                                   g
                                                                                                                                           ò
                                                                                                                                                                      g
                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                          ₹
                                                                                                                                                                                                                                                                                                                    Ωp
                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                               ò
                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                           PRI 19-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ä;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAGAAGGCCCAAGAAAGGAAACCCA 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                   AB060908
Macaca fascicularis brain CDNA clone:QtrA-14007, full insert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40.0%; Score 1504.6; DB 9; Length 1924;
.larity 92.5%; Pred. No. 7.3e-253;
Conservative 0; Mismatches 124; Indels 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="temporal lobe right"
/clone_lib="macaque brain cDNA library QtrA"
                                                                                 AB060908.1 GI:13874585
oligo capping; fis (full insert sequence)
Macaca fascicularis (crab-eating macaque)
Macaca fascicularis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Macaca fascicularis"
|mol_type="mRMA"
| xref="taxon:9541"
|clone="QtrA-14007"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      siom primer used for sequencing
5' end primer [CTTCTGCTCTAAAAGCTGCG]
end primer [CGACCTGCAGCTCGAGCACA] )
Location/Qualiflers
1...1924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /dev_stage="adult"
                                                                                                                                                          Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rokyo).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Custom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Simi
Matches 1616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37
       RESULT 10
AB060908
LOCUS
DEFINITION
                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                       ORGANISM
                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                 AUTHORS
                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
```

```
TITAARGAIITATGICITIGCITGTAACTCCTGICTCCCTAAAATGTAAAAGTAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITICITITICIDATGRACIGGATATITITIGCARATAACTIGCAGTAATAGTICAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GIGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATTICAAAIGCCAACAICTCCCAICCAATIACCIAITICAICTITGAGGIGIAAICIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITICITITITICIAIGIACIGGAIAITITITGCAIAIAACITGCAGIAATAGITCAAAAT
                                                                                               TGAAAATAAATTTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1475 AATTICAAAIGCCAACAICTCCCCAICCAATTACCTAITICAICTITGAGGIGTAAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAAACTTTCTTAGGACAATAATGTAAAA
                                                                                                                                                              rrerraraccccrrrrccagrrrrargcacaagraaccaggargagrcaraagacr
                                                                                                                                                                                                                                                                                                                                              GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT
                                                                                                                                                                                                                                                                                                                                                                          GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                            CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                          CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCACAACCCCTTTATTTAGCTAAAGCATTCTTTCTACTGACTTCTTAAAGTCTTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAGTCTTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAAGCTTAAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTAAGCTCTCTCTCTCTAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTTGG
                                                                                                                                                                                                              CCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGAGACACACC
                                                                                                                                                                                                                                                                              TTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1621
                  601
                                                                                  661
                                                                                                                  695
                                                                                                                                                 721
                                                                                                                                                                                 755
                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                815
                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                              875
                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                               932
                                                                                                                                                                                                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                                                                                                                                                                                                995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                               qq
                                                                                                                                                                            g
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                  à
                                                                                                                                                 ò
                                                        use outpublished

E 2 (bases 1 to 1709)

E 1 sogai, T. and Yamamoto, J.

E 1 sogai, T. and Yamamoto, J.

E 2 (bases 1 to 1709)

Loud (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7

Razusa-Kamatari, Kisarazu, Chiba 292-0818, Japan

(E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986)

RED Numan cDNA sequencing project supported by Ministry of

Economy, Trade and Industry of Japan; CDNA full insert sequencing:

Research Association for Biotechnology (RAB); cDNA library

construction: Helix Research Institute (HRI) (supported by Japan

Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB,

HRI, and Biotechnology Center, National Institute of Technology and

Evaluation; clone selection for full insert sequencing: RAB,

RAB; annotation: HRI and RAB.

Location/Qualifiers

rce

1. 1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTAGGACTICTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541 AAGTITAGAAATAITAICITATTATATATCCTIAGGCAACTCTGATATGTGGCATCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGTTTAGAAATATTATCTTATTATATATCCTTAGGCAACTCTGATATGTGGCATCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGACTACATTTGAAAGAAAACTTCAAGATCGAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAGCAGACTCTGGGGGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTICIAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>ACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
Oshima, A., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S., Nagahari, K., Masuho, Y., Nagai, K. and Isogai, T. Nabo human cDNA sequencing project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"

mol_type="manNa"

mol_type="manNa"

clone="NOVAR2000710"

tissue_type="ovary"

clone_Tib="NOVAR2"

/dev_stage="adult"

/note="cloning_vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
44.5%; Score 1673.4; DB 9;
Best Local Similarity 99.9%; Pred. No. 2.6e-282;
Matches 1674; Conservative 0; Mismatches 1;
                                                    Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             515
                                               JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
장
연
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

1260

1294

1020

960

934

994

780

814 840 874 1054

1080 1114 11140 1174 1380

1414

1440

1560

1594

1620

g

 $\delta$ a ઠ Dp ò a S

g

g g  $\delta$ 

a & a

8 8 8

QQ

B 55

8 8

õ g à a

ઠ g à

```
1080
                                                                                                                                                                                  1140
                                                                                                                                                                                                                                                     1200
                                                                                                                                                                                                                                                                                                                       1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1440
                                                                                                                                               1114
                                                                                                                                                                                                                 1174
                                                                                                                                                                                                                                                                                      1234
                                                                                                                                                                                                                                                                                                                                                          1294
                                                                                                                                                                                                                                                                                                                                                                                                                                1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1560
                                                                                                                                                                                                                                                                                                                                                                                           GIGACCTGACCACCTCAGGCACACTITCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITICITITICIATGIACIGGAIATITITIGCAIATAAACTIGCAGIAAIAGITCAAAAAT 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                      GTAAGCTCTCTCTCTCTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA
                                                                                                                                                                                                  CAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT
                                                                                                                                                                                                                                                                                                                      TITAATGATITAATGICITITGCTIGTAACTCCTGTCTCCCTAAAATGTAAAAGTAAAACG
                                                                                                                                                                                                                                                                                                                                               TITAATGATTTATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAAGTAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                 GTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITICITITICIAIGIACIGGATAITITIGCATATAAACTIGCAGIAATAGITCAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Suzuki,O., Sasaki,N., Aotsuka,S., Shoji,T., Ichinara,T., Shiohata,N., Matsumoto,K., Hirano,M., Sano,S., Nomura,R., Yoshikawa,Y., Matsumara,Y., Moriya,S., Chiba,E., Momiyama,H., Onogawa,S., Kaeriyama,S., Satch,N., Matsunawa,H., Takahashi,E., Kataoka,R., Kuga,N., Kuroda,A., Satch,I., Kamata,K., Takahashi,S., Tersahima,Y., Watanabe,M., Sudiyama,T., Irie,R., Otsuki,T., Satc,H., Wakamatsu,A., Ishii,S., Yamamoto,J., Isono,Y., Kawai-Hio,Y., Saito,K., Nishikawa,T., Kimura,K., Yamashita,H., Matsuo,K., Nakamura,Y., Sekine,M., Kikuchi,H., Kamashita,H., Wagatsuma,M., Murakawa,K., Kanehori,K., Takahashi-Fujii,A.,
     GATGAAATAGACTGATTGTGGCAATAAGAGTCCCCAATTCCAACCTGACTCTGGTGTAGAT
                                                              CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT
                                                                                                                                             1055 ICCACAACCCCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAGTCTTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTACCAATAAGTCTCCACAAATATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAATCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT
                                                                                                            TCCACACCCCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAGTCTTTAGA
                                                                                                                                                                                CAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT
                                                                                                                                                                                                                                                    GTAAGCTCTCTCCTGCTTCAAGAICTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   אס 1709 bp mRNA linear Homo sapiens cDNA FLJ41804 fis, clone NOVAR2000710.
AK123798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AK123798.1 GI:34529425
oligo capping; fis (full insert sequence)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligo capping; fis (1
Homo sapiens (human)
Homo sapiens
                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1475
     935
                                        961
                                                                         995
                                                                                                                                                                              1081
                                                                                                                                                                                                                 1115
                                                                                                                                                                                                                                                    1141
                                                                                                                                                                                                                                                                                     1175
                                                                                                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                                         1235
                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                                                                                                                                                                            1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
AK123798
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                  g
                                                                                                    à
                                                                                                                                    g
                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                               д
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                    ò
                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P
                                                                                                                                                             ô
                                                                                                                                                                                                                                                                154
                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                             274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITCCACACTAAAAICCICAAGCIGCITIAICACCITCCAGCAAIGAAGACAAIGCAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAAAATATTCTATGTGTTTTTGC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAAAATATTCTATGTGTTTTTTGC 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAAAATAAATTTCTAATCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGAGACACACC 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACT 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGTTTAGAAATATTATTATTATATATACCTTAGGCAACTCTGATATGTGCCATCTCTG 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGAGACACACC 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIGITATACCCCTICCCTITIGGAGITITATGCACAAGTGACCAGGATGAGTCATAAGACT 934
                                                                                                                                                                                                9
                                                                                                                                                                                                                               94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                              GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                 ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                                                                                                                                                                         ATGACTACATTTGAAAGAAAACTTCAAGATCGAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                        ACTICTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                              AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCATGAGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGITTAGAAATATTATCTTATTATATCTTAGGCAACTCTGATATGTGGCATCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAAACTTTTCTTAGGACAATAATGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                               Gaps
                                                                                                                                                             ö
                                                                                                                          Length 1709;
                                                                                                                                                           Indels
                                                                                                                            ;
9
                                                                                                                         Score 1673.4; DB 6, Pred. No. 2.6e-282; 0; Mismatches 1;
Location/Qualifiers
1. .1709
/organisma-"Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                       Query Match
Best Local Similarity 99.9%;
Matches 1674; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  575
                                                                                                                                                                                                                              35
                                                                                                                                                                                                                                                                                                95
                                                                                                                                                                                                                                                                                                                                                                     155
                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          875
                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                       source
   FEATURES
                                                                                      ORIGIN
```

11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ORGANISM Homo sapiens ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE I Sogai, T., Sugiyama, T., Otsuki, T., Wakamatsu, A., Sato, H., Ishii, S., Yamamoto, J., Isono, Y., Nagai, K. and Irie, R.  TITLE Full-langth human cona JOURNAL Patent: EP 1440981-A 961 28-JUL-2004; Research Association for Biotechnology (JP)
121 TGAANTAATTTCTAATCCCCCGACTAACTGATGACCCCTCTTCTAGGCCCAAGAGA 803 141 TGAAATTAATTTCTAATCCCCCTCAATTGAATGACCCCTTCTTGGCCCAAGAGA 803 152 CCTCAAATGACTCTAATCCCCCTTCAATTGAATGACCCCTTCTTCTAGGCCAAGACA 803 154 TTGTTTATACCCCTTCCCTTTGAAATTTTGCCAATTGAAATGACTAACTA	1681 AAGATGAAATGAAGCATATATAATTGTCAATTTTTCAATTTTTTAGTCAACAGGAATC 1740

found

셤

ò

g

ò

g

ò

g

ò

ò

```
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov Series: IRAL Plate: 32 Row: b Column: 10
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21687148.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAAGCCAAGAAGTTTCATCC 180
                                                                                                                                                                                                        contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
Madan, Stephanie Rodrígues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTCCCTCACAAGGAAAGTGAGCAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144 ATGACTACATTIGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGATTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGTGGCTATGAGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTICIAAICAGGAAAACGAGAAIGGCAGIGGIICIGAAGAAGIGIGIGCIACACII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204 ACTICIAAICAGAAAACGAGAAIGGCAGIGGIICIGAAGAAGIGIGCIACACIGICAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTAGGACTICTGTTAGTAGGCCTTGTTCCTGCACCCATGAGGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTTTAGAAATATTATCTTATATATATCCTTAGGCAACTCTGGATATGTGGGCATCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         564 AAGTTTAGAAATATTATCTTATTATATATCCTTAGGCAACTCTGATATGTGGCCATCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGCTTAGGTGAAATTGAAAATTGACAATGACCTAAAATATTCTATGTGTTTTTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         624 TGGCTTAGGTGAAATCATATAAATTGACACAATGACCTAAAATTTCTATGTGTTTTTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGIAAAGITIGAGGACATGGAGGIGATAAAAAAAACTTICTTAGGACAATAATGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAACTTTCTTAGGACAATAATGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 2604.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                      69.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 2606; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 2648)

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max., S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleron, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Morley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Ranchez, A., Whiting, M., Madan, A., Roug, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, J., Sanilus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
                                                                                                          2359
                                                                                                                                                   3592
                                                                                                                                                                                                                                                                                                              3712
                                                                                                                                                                                                                                                                                                                                                     2179
                                                                                                                                                                                                                         GTAGTIGIACAICTTACTIGICICAGCAIATCACCAIAIAGATAIACTAIAAATITGITAA 3652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      bp mRNA linear PRI 01-APR-2004 (cDNA clone IMAGE:4109064).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (19-FEB-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Rocm 11A03, Bethesda, MD 20892-2590,
TCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTTGACATTATGAATAAGGTGGCTA
                                                                                                                                                                                                                                                                                                                               TAAGGCTTCTTTTAGTCATTATAATATTTTTGAGATTCATCTATGTTTAATGTTCTATCA
                                                                                                                                                                                                                                                GTAGTTGTACATCTTACTTGTCTCAGCATATCACCATATAGATATACTATAATTTGTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Institute for Systems Biology http://www.systemsbiology.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                         TAAATGAAAAAAAAAAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                               2178 TAAATGAATAAAGCGACTACAAA 2156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2648
Homo sapiens LOC148823, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC024174
BC024174.1 GI:18848218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 2648)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Strausberg, R.
                                                                                                      2418
                                                                                                                                                                                     2358
                                                           3473
                                                                                                                                            3533
                                                                                                                                                                                                                           3593
                                                                                                                                                                                                                                                                 2298
                                                                                                                                                                                                                                                                                                          3653
                                                                                                                                                                                                                                                                                                                                                2238
                                                                                                                                                                                                                                                                                                                                                                                         3713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
BC024174
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
```

300

323

360

383

420 443

240

263

203

09 83

Gaps

; 0

480

503

540

```
NOTE: This is a 'working draft' sequence. It currently consists of 10 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
Sequencing vector: plasmid, 04
Chemistry: Dye-primer ET; 100% of reads
Chemistry: Dye-terminator Big Dye; 04 of reads
Chemistry: Dye-terminator Big Dye; 04 of reads
Assembly program: Phrap; version 0.990319
Consensus quality: 138274 bases at least Q40
Consensus quality: 138356 bases at least Q20
Consensus quality: 139182 bases at least Q20
Insert size: 142000; agarose-fp
Insert size: 140368; sum-of-contigs
Quality coverage: 4.64 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1377: contig of 31377 bp in length 31477; gap of unknown length 63011: contig of 31534 bp in length 63111: gap of unknown length 63111: gap of unknown length 6112 64145: contig of 1734 bp in length 64945: contig of 1734 bp in length 67606: contig of 2661 bp in length 6707 77674: gap of unknown length 67707 7774: gap of unknown length 7775 89256: contig of 1948 bp in length 7775 89356: contig of 11482 bp in length 7775 89356: contig of 11448 bp in length 775 89356: contig of 11448 bp in length 7857 100400: contig of 11415 bp in length 7857 100500: gap of unknown length 7857 100500: gap of unknown length 7857 12513: contig of 13698 bp in length 7858 12513: contig of 13698 bp in length 7858 12613: contig of 13698 bp in length 78514 141268: contig of 18555 bp in length 78515.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31478. .63011 /
/note="assembly_name:Contig11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'note="assembly_name:Contig10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     //loce="assembly_name:Contig2"
63112. .64845
/note="assembly_name:Contig2"
64946. .67606
/note="assembly_name:Contig3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="assembly_name:Contig4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="assembly_name:Contig8"
125814. .141268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="assembly_name:Contig9
clone_end:SP6
vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Homo sapiens"
/mol type="qenomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic_DN/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone="RP11-115C4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .141268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .31377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             112016
125714
125814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31378
31478
63012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63112
64846
64946
67607
67707
77675
77775
89257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
```

Length 141268;

.. 7

DB

Score 3511.6; Pred. No. 0;

93.3%;

Query Match Best Local Similarity

```
5418
                                                                                                                                                                                                                                                                                                 5358
                                                                                                5598
                                                                                                                                       5597 AGAACATIGACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAAT 5538
                                                                                                                                                                                    5298
                                                                                                                                                                                                                                                                                                                                                                                                                                                  5178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4698
 ä
                                                                                                                                                                                                                                                                                                                                                                                                5238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGA 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GIGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGA 4878
                                                                                                                        352
                                                                                                                                                                        412
                                                                                                                                                                                                                         472
                                                                                                                                                                                                                                                                          532
                                                                                                                                                                                                                                                                                                                          592
                                                                                                                                                                                                                                                                                                                                                                         652
                                                                                                                                                                                                                                                                                                                                                                                                                          712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            952
                                          TITCICITITGEGCTIGGCAGGAAACGAGAATGGCAGTGGTTCTGAAGAAGTGCTACA
                                                                       CTGTCATTAATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATG
                                                                                                                                                                                                                                      crerchararcacarccccarcagagarccrccrcaaccarcargargecrarg
                                                                                                                        AGAACATTGACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAAT
                                                                                                                                                                                                                                                                                        ATGCAGAATAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTT
                                                                                                                                                                                                                                                                                                                                        TCTGGCTAAAGTTTAGAAATATTATCTTATTATATATATCTTAGGCAACTCTGATATGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACACATTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTGGTTTCCACAACCCCTTTATTTTACGTAAAGCATTCTTTTTTTACTTAAG
                        TTTCATCCACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACA
                                                                                                                                                                       ATGCCCTTCTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATG
                                                                                                                                                                                                                       AAGTIGIGITICCACACTAAAAICCICAAGCIGCITITAICACCIICCAGCAAIGAAGACA
                                                                                                                                                                                                                                                                         473 ATGCAGAATAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTT
                                                                                                                                                                                                                                                                                                                       TCTGGCTAAAGTTTAGAAATATTATCTTATTATATATCCTTAGGCAACTCTGATATGTGG
                                                                                                                                                                                                                                                                                                                                                                      CATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAAAATATTCTATGT
                                                                                                                                                                                                                                                                                                                                                                                               CATCTCTGTGGCTTAGGTGAAATCATAGACACAATGACCTAAAATATTCTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                        ATGTAAAATGAAAATAAATTTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAAGAGCCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACACACCTTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTTGGTTTCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCNAGACAACTTTGAATCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC
 Gaps
 1;
 Indels
25;
Mismatches
.;
Conservative
3537;
                                                                                                                                                                                                                                                                                               5417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4937
                                              5717
                                                                       233
                                                                                                5657
                                                                                                                        293
                                                                                                                                                                        353
                                                                                                                                                                                                                       413
                                                                                                                                                                                                                                                5477
                                                                                                                                                                                                                                                                                                                       533
                                                                                                                                                                                                                                                                                                                                                5357
                                                                                                                                                                                                                                                                                                                                                                                               5297
                                                                                                                                                                                                                                                                                                                                                                                                                         653
                                                                                                                                                                                                                                                                                                                                                                                                                                                5237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4697
                                                                                                                                                                                                                                                                                                                                                                        593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         953
Matches
                       Š
                                      ద
                                                               ठ
                                                                                          g
                                                                                                               8
                                                                                                                                       8
                                                                                                                                                                      8
                                                                                                                                                                                         g
                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

00   3173   GARTCATTGCTGTATAAGTGCTTTTTAACCTGTAATTTTGTGAAGCTTATCTTTTATGC 3232   11111111111111111111111111111111	REBULT 6 AC074365/c LOCUTOR AC074365 DEFINITION Home sapiens chromosome 1 clone RP11-115C4, WORKING DRAFT SEQUENCE, 10 unordered pieces. ACCESSION AC074365.5 G1:10280935 KEYWORDS HOME Sapiens (human) AC074365.5 G1:10280935 KEYWORDS HOME Sapiens (human) AC074365.5 G1:10280935 KEYWORDS HOME Sapiens (human) AC074365.5 G1:10280935 MERTATYOTA MALEAZOA CHORDATA; Craniata; Vertebrata; Buteleostomi; Burerston, Mataryota; Butheria; Primates; Catarrhini; Hominidae; Home. AUTHORS Haterston, R.H. AUTHORS HASEL TO 141268) AUTHORS HASEL TO 141268 AUTHORS HASEL TO 14
133923 CTPAGATGACATGACACCAGAAGTGATTTGGATTTTTTTTTT	2693 AATAGGTGGACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTTATTCAACGA 2752 134582 AATAGGTGGACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTCTATTCAACGA 134641 2753 ATTCTTATCCCCTTTGTGGTGATTTTAATGTGCGGAAGGGAACAATAGAAATTTTGCA 2812 134642 ATTCTTATCCCCTTTGTGGTGATTTTAATGTGCGGAAGGGAACAATAGAAATTTTGCA 134701 2813 ATTCTAGAAAAATTTTTACTTTTTAATTTTGCGGAAGGGAAGCAATTTTAGG 2872 134702 ATTCTAGAAAAATTTTTAATTTTGTCGCTTTTTATGCCAATTTTAGG 134761 2873 AAAATGACAAAATTTTTAATTTTGTCTTTGTGATTTAATAATACC 2932 134762 AAAATGACAAAATTTTTAATTTTGTCTTTGTGATTATAGATTAAATACC 134821 2933 TTATTTGTAATAAAAATTTTTAATTTGAGTAACAGACTGTTTATGAAAATACC 134811 2933 AAGCAATAGGTTAAAAAATTTTAATTTGATAACAAGAAGGAACTTAAAGAAGAGGGC 134881 2933 AAGCAATAGGTTAAAAAATTTAATTTGATAACAAAATTATCAAGAAATAAAT

1192

1132

133142

133202

1372

1432

133382

1552

```
ACTTTCCATTTAATGATTTATGTCTTTGCTTGTAACTCCCTGTCTCCCTAAAATGTATAAA
                                                 TCTTTAGACAAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC
                                                                                              TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAAACTTTGAATCTACC
                                                                                                                        TATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC
                                                                                                                                             TATGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC
                                                                                                                                                                   ACTITICCATITIAATGATITIATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAA
                                                                                                                                                                                                                              CCTTGGTTTCCACAACCCCTTTATTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAG
                                                                                                                                                                                                                AGTAAACGGTGACCTGACCACCTCAGGCACTTTCTCAGGACCTCCTGAGAGTGTATCC
                                                                                                                                                                                                                                                                                                     GGTTTTGGTTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCT
                                                                                                                                                                                                                                                            CAGGCCATGGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTG
                                                                                                                                                                                                                                                                                                                   GSTITIGGITACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCT
                                                                                                                                                                                                                                                                                                                                                  GCTCACCAATTTCAAAIGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGT
                                                                                                                                                                                                                                                                                                                                                                 GCTCACCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATAAAAAAAAGATGAAATGAAGCATATATAAATTGTCAATTTTTTCAATTTTTCTAGTCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGAATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAAATAAACTTGTGCTTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTAATCTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTT
                                                                                                                                                                                                                                                                                                                                                                                                          ACTICAATITITICITITICIAIGIACIGGATATITITIGCATATAAACTIGCAGTAATAGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAAAAATTAATAGTTTTTGACATTGGCTTTTTCTGAGAAGAGAAATTGAAAGTGTCACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAGAATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITIGITIGCAACACACTAGITAATITTAACCIGIGACTAGITATCICTACCGAAGGIGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGTAGTITCTGGTITTAAAAIICAAGCAAACTGGAAAATAAICCAICTAATTAIGCIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGACAATGCATTCATTATATATTTTTTTGTATAGTTACAGTATACGAGTTGAGTATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTGTTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTTACCGAAGGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTTTCCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAGCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTGACAATGCATTCATTATATTTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCC
                                                                                                                                                                                                                1253
                                   1013
                                                                                                   132963
                                                                                                                         1133
                                                                                                                                                                     1193
                                                                                                                                                                                                                                                           1313
              132843
                                                         132903
                                                                               1073
                                                                                                                                             133023
                                                                                                                                                                                          133083
                                                                                                                                                                                                                                      133143
                                                                                                                                                                                                                                                                                                        1373
                                                                                                                                                                                                                                                                                                                             133263
                                                                                                                                                                                                                                                                                                                                                   1433
                                                                                                                                                                                                                                                                                                                                                                                              1493
                                                                                                                                                                                                                                                                                                                                                                                                                                          1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                               133443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      133563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1913
                                                                                                                                                                                                                                                                                                                                                                        133323
                                                                                                                                                                                                                                                                                                                                                                                                                     133383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2033
            g
                                                  g
                                                                                              Q
                                                                                                                                        g
                          ₹
                                                                        \delta
                                                                                                                     à
                                                                                                                                                                 ò
                                                                                                                                                                                   g
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                   Dp
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                        유 상 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                 |||||
|TTCTCTTTGTGCTTGGCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACA 132122
                                                                                                                                                                                                                                                                                                                                                                                                               132302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   132482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                                                                                                                                                                        472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGA 1012
                                                                                                                                                                                                                                                                                                                                                           412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             832
                                                                                                                                                                                                                                                                             ATGCCCTTCTTAGGACTTCTGTTAGTAGGCCTTGTTCTGCTGCACCCTTGAGGCATGATTATG
                                                                                                                                                                                                                                                                                                                                                                                                  AAGTIGIGITIICCACACIAAAAICCICAAGCIGCIIIIAICACCIICCAGCAAIGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCATCCACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACA
                                                                                                                                                                                                                                                                CTGTCATTAATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGACTATG
                                                                                                                                                                                                                                                                                                            AGAACATTGACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAT
                                                                                                                                                                                                                                                                                                                                                       ATGCCCTTCTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGGATTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGGCTAAAGTTTAGAAATATTATATATATATATCCTTAGGCAACTCTGATATGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACAAATGACCTAAAATATTCTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GITITIGCTTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAAACTTTCTTAGGACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAAGAGCCTCAGATGAACCTGAAAGACTGGATTTCTGGCCATGATAGGAAGGGAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGCAGAATAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGTAAAATGAAAATTAAATTCTAAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACACACCTTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATAAGACTGATGAAATAGACTGATTGTGGCCAATAAGAGTCCCCAATTCCAACCTGACTCTG
                                                                                                                                                                                                    Gaps
                                                                                                                                                                              Length 185467;
                                                                                                                                                                                                   ı,
                                                                                                                                                                                                  18; Indels
                                                                                                                                                                             DB 9;
Wellcome Trust Sanger Institute ode: SC
                                                                                                                                                                          Query Match
93.6%; Score 3522.2;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 3544; Conservative 0; Mismatches
                                                                                                                                                                                                  0; Mismatches
                                                          Location/Qualifiers
1. 185467
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_Xref="taxon:9606"
/chromosome=""/chromosome=""/clone="RP11-978115"
/clone_lib="RPCI-11.4"
       Center: Wellcome Trust Sanger Inst
Center code: SC
Web Site: http://www.sanger.ac.uk
Contact: humquery@sanger.ac.uk
                                                                                                                                                                                                                      173
                                                                                                                                                                                                                                                                                                           293
                                                                                                                                                                                                                                           132063
                                                                                                                                                                                                                                                                 233
                                                                                                                                                                                                                                                                                                                                 132183
                                                                                                                                                                                                                                                                                                                                                                                                   413
                                                                                                                                                                                                                                                                                                                                                                                                                                              473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            713
                                                                                                                                                                                                                                                                                                                                                        353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           533
                                                                                                                                                                                                                                                                                                                                                                                                                         132303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          132483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     132543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  132603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          132723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           953
                                                              FEATURES
                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                   an A
                                                                                                                                                                                                                                                                                                                                                                                                                 g & g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6 B 6 B 6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

133622

1732

133682

133742

1852

133802

1972

1912

133862

133922

2092

2032

133502

1672

Db 3735 TGAAGGGTAGAGTTATAGAATTTTGTCAAATGTATT  Qy 3377 TGAAGAGAACACACACACCTCCCCCAGAAATGTATT  Db 3437 TCACCAGTCCTGGCACACACCCCCCCAGAAAGTTCC  Qy 3437 TCACCAGTCCTGGCACCACACCTCCTCCTATAA  Qy 3437 TACACCAGTCCTGGCACCAACACATCATTTTTTGTGTATAA  Qy 3855 TTCACCAGTCCTGCCACCATGATCTGCTTCGTATAA  Qy 3856 TTCACCAGTCCTGCCACCATGATTTTTTTGTGTGTGTTA  Qy 3915 TAGCAATGTACCCTTTCCATATTTTTTGTGTGTGTGTA  Qy 3617 TAGCAATGTACCCTTTCCATATTTTTTTTTTTTTTTTTT	ALGO6804  LOCUS  ALGO6804  HUMAND DNA Sequence from clone RP11-97811  ACCESSION  ALGO6804  ALGO6804  ALGO6804  ALGO6804  ALGO6804  ALGO6804  ALGO6804  HTG. SOURCE  Almeida,J.  TITLE  JOURNAL  SUBMITTELE  JOURNAL  SUBMITTELE  JOURNAL  On Oct 24, 2002 this sequence version sequence assembly data is comparate where and fference assembly data is comparate where alference assembly data is comparate where alference assembly data is comparated in a note of the overlapping clone, only a small overlap as described above, only assembly was confirmed by their source of the data of the data of following and repeats; all regions one plasmid subclone or more than one Massembly was soufirmed from associate priin the feature table with their source of the data of the
2242 TGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAG 2301 2655 TGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAG 2714 2302 TTTCAGATTGGACCATCAGAAGCAGAAGTCACTATTTCAAGTCAGTGCTCAAAAG 2714 2312 TTTCAGATGTTAAGCTGATGCAGTTCATGCAGTGATTTGGGAAGCC 2361 2715 AGACAGGTGGATCTTTGAGCCCAGGAGTTTGAGCCAGTACTTTGGGAAGCC 2421 2775 AGACAGGTGGATCTTTGAGCCCAGGAGTTTGAGGCCAGACTGCACACACA	
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

vs unless otherwise noted: all or sequenced with an alternate or sequenced with an alternate data (i.e., phred quality >= all sequencing problems, such jions were covered by at least in Migset. The following primary accession numbers given ce databases: Em:, EMBL; Sw:, information on the WORMPEP egans/wormpep This sequence clone contigs of human er Centre Chromosome 1 Mapping and at AATTATAACTGTTCTAGAIATTTG 3496 linear PRI 23-OCT-2002 II5 on chromosome 1, complete FAAGGCTTCTTTTAGTCATTATAA 3556 GIAGITGIACATCITACTIGICIC 3616 CCACAGAGTGCTTTTCCCTGAGT 3436 TCTAATCACTGATGGATATGTAGG 3676 1.4 constructed by the group see i, Vertebrata; Euteleostomi; ni; Hominidae; Homo. |||||| |TAAATG 4136 TAAATG 3718

```
Isogai, T. and Yamamoto, J.

Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan

Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan

(E-mail: JenomicseRhi. oc. jp, Tel: 181438-52-3986)

NEDO human CDNA sequencing project supported by Ministry of

Economy, Trade and Industry of Japan; CDNA full insert sequencing:

Research Association for Biotechnology (RAB); CDNA ilbrary

Construction: Helix Research Institute (HRI) (supported by Japan

Key Technology Center etc.); 5. & 3'-end one pass sequencing: RAB,

HRI, and Biotechnology Center, National Institute of Technology and

Evaluation; clone selection for full insert sequencing: HRI and

RAB; annotation: HRI and RAB.

Icoation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /protein_id="bac85873.1"
/db_xref="G1:34530125"
/translation="wwmleddsnsstgcgarncveclvflsvlgcgserkgomrtqqag
RwiragraassernpregtillidFqsPelplaargwqehepvvrcnvlphafsswcFqq
NFPRWSETQELRNRVTVKRWEIISCENSGRK"
3915 TAGCAATGTACCCTTTCCATATTTATTTTGTGTGTAAGGCTTCTTTTAGTCATTATAA 3974
                                                                                                                                                                                                                                                                                                                   PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minomiya, K., Wagatsuma, M., Kanda, K., Kondo, H., Yokoi, T.,
Kodaira, H., Furuya, T., Takahashi, M., Kikkawa, E., Omura, Y., Abe, K.,
Kamihara, K., Katsuta, N., Sato, K., Tanikawa, M., Yamazaki, M.,
Sugiyama, T., Irie, R., Otsuki, T., Sato, H., Wakamatsu, A., Ishii, S.,
Yamamoto, J., Isono, Y., Kawai-Hio, Y., Saito, K., Nishikawa, T.,
Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M.,
Kikuchi, H., Murakawa, K., Kanehori, K., Takahashi-Fujii, A.,
Oshima, A., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S.,
Nagahari, K., Masuho, Y., Nagai, K. and Isogai, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                 4035 AGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCACTGATGGATATGTAGG
                                  3557 TATTITIGAGATICALCIAIGITIAARGIICIAICAGIAGIIGIACAICITACITGICUC
3975 TATTITIGAGAIICAICIAIGIITIAAIGIICIAICAGIAGIIGIACAICCIACITGICUC
                                                                                                              3617 AGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCACTGATGGATATGTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 4136;
                                                                                                                                                                                                                                                                                                                     mRNA linear
clone BRACE3002390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .4136
/organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9606"
/clone="BRACE3002390"
/fissue type="cerebellum"
/clone lib="BRACE3"
/note="cloning vector: pME18SFL3"
                                                                                                                                                                                                         4095 ATATTTAAGTTTTTGACATTATGAATAAAGTGGCTATAAATG
                                                                                                                                                                                        3677 ATAITIAAGITITIGACATIAIGAATAAAGIGGCIATAAAIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                   AK124520
AK124520 AK1242529 fis, clone BRA
AK124520
AK124520.1 GI:34530324
Oligo capping; fis (full insert sequence)
Homo sapiens
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136. .537
/note="unnamed protein product"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 3590;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                    RESULT 4
AK124520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                       a
                                                                                                                  à
                                                                                                                                                   a
                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                          셤
                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCACCAGTCCTGGCAACCAATGATCTGCTTATAATTATAACTGTTCTAGATATTTG 3496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGCAATGTACCCTTTCCATATTTATTTTGTGTGTGTAGGCTTCTTTTAGTCATTATAA 3556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3555 AAATGTAACTATCTTATGGGTTATGAAGAACAATAGAATCGTTGCTGTATAAGTGCTTT 3614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTAAGGGTAGAGTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACCTCCTTA 3376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAGAGACAGAACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGT 3854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrcaccagrecraccaaccaardarcrecrrecraraarraacrerreragararrr 3914
                                                                                                                                                                                                                                                                                                                                                                                                 3194
                                                                                                                                                                                                                                                                                                                                                                                                                                      2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCCACAGCAGATGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAAGAGAGGATTTAAG 3554
       2955 CCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAGTGAGACCTGTCTCAAAAAA 3014
                                                                                                                                                                                                                                CIGIACIGACCTITIAGICATIGACAAGCAITAAICAATAGGIGGACTCCAGATAACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3017 TGATTGGTAGAAGGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGATTGGTAGAAGGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAATATTTGAACATTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAACCTGTAAATTTTGTGAGGTTATCTTTTATGCATATAAAATATTTGAACATTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIGITIATATITITAATCAGITITIACICAAGIGIGATTATATACAAGAAAAIGTAACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGITITATATITITITAATCAGTITITACTCAAGIGIGAGATTATATACAAGAAAATGTAACCAC
                                                                                                                                                                                                                                                                                                                                                                                3135 TTTGCTGTATACACATTTTGCCTCTCTATTCAACGAATTCTTATGCCCTCTTGTGGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         3195 TITAATGTGCGGAAGGGAACAATAGAAATTTTGCAATTCTAGAAAGTCATCTGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCCACAGAGCAGATGTCTTAATCTTTCGGAGATCTAGTTTTTCAGCAAAGCAGGATTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATGTAACTATCTTATGTGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAAGAGACAGAACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGT
                                                                                   2597 AAAAAAAAAAAGTITCAGAIITITGGAGCAIIITCAGAICTICCAGAIITICAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                      TITAATGTGCGGAAGGGAAACAATAGAAATTTTGCAATTCTAGAAAAGTCATTCTGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>AATATGTCAGTCCTGTAGATATTAGCCAATTTTAGGAAAATGACAAAATTTTTTACTTTT</u>
                                                                                                                                       CCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTC----AA
                                                               GTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAG
                                                                                                                                                                                                                                                                                      CTGTACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCA
                                                                                                                                                                                                                                                  3015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3497
                                                                                                                                                                                                                                                                                                                           3075
                                                                                                                                                                                                                                                                                                                                                                                                                                      2777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3435
                                                                                                      2895
                                                                                                                                         2542
                                                                                                                                                                                                                                                                                        2657
                                                                                                                                                                                                                                                                                                                                                                2717
                                                                 2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                  ద
                                                                                                                                         ò
                                                                                                                                                                          셤
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                      ò
                                                                 8
```

1342 ATCAACCTCTTTAATTTTTTTTTTTTTTTTTTTTTTTT	2 AGIGACCAGACCTITIGCIAACCTGACAITIACITCAATTITCITITICTATGATACTGG 1	1995 AIMITTIGCAINIANACTIGCAGINATAGITCANANATTANTAGINTTIGACAITGGCT 2054 1642 TITCIGAGAAGAGAATIGAAAGIGTCACAAANAAAAAAGATGAAATGAAAGCATATAT 1701 2055 TITCIGAGAAGAATITTIGAAAGITCACAAAATAAAAAAAGATGAAAGAATATTI 2114 1702 AATIGICAATITITICAATITITCAACAAGAAAAGAAGAATICAAAAATT 1761			4—4	1942 CCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGACAATGCATTCATT	2002 IGIATAGTTACAGTATACGAGTIGAGTATCCCTTAGATGAGATG	2062 ITITGGATTICAGATTATTTTGGATTITGGATATTTCCATACATATATAAGAGAGT 2121 	2122 TGGAAATGGGATTCAAGTCTAATCATAAAATTCACTTATGTTTGATATACACCTTATCT 2181 	2182 GAATAGCCTGAAGGTAATTTTATACAATATTTTAAATTTTTTTT	2242 TGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAG 2301 	2302 TITCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCA 2361 	2362 AGACAGGTGGATCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACC 2421 	2422 TCGTTTCTACAAATAATTAAAAATTAGCCAGGTGGTGGTGGTGCACACCTGTAGTCCCAG 2481
6 6 6 6 6	8 8 8 °	or or or	a & a	S d	95 Q	ර් සි	oy Dp	oy Db	Qy Db	P 64	QY DP	Qy	QY	ò
Qy         262 TCCTCCCTGAGCTCCAATGATGAGAACATTGACTCCCTCACAAGGAAAGTG         321           Db         675 TCCTCCCTGAGCTCCAATGATGACTATGAGAACATTGACTCCCTCACAAGGAAAGTG         734           Qy         322 AGACAGTTAGAGAAAGGTCAGAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGG         381           Db         735 AGACAGTTAGAGAAAGGTCAGAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGG         794           Qy         382 CCTTGTTCCTGCACCCATGAGAACAGAATATGCCCTTCTTAGGACTTCTTAGTAGG         794           Db         795 CCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTTCTCCACACTAAAATCCTCAA         441           Db         795 CCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTTCTACCACTAAAATCCTCAA         77	GCTGCTTTATCACCTTCCAGCAATGAAGACAATGCGAATAGCAGACTCTGGCGAAGTTG 50	AGTTTAGAATTTTTTTTTTTTTTTTTTTTTTTTTTTTT	Db	742 CCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAACTCAGATGAACCTGA 1155 CCTGACTAACTGAATGGACCCTCTCTAGGCCAAAGAAGACCTCAGATGAACCTGAA	CTTCCCTTTT B	OY 862 GGAGTITATGCACAAGTGACCAGGATGAGTCATAAGACTGAAATAGACTGATTGTGG 921		FTTAG 10       FTTAG 14	CAACC 11	TGCTTCAA 116	GTCTTTGC 122 	AGGCA 1		

0y         3261 TTATATTTTTAATCACTTTACTCAAGTGTGATTATACAGGAAATGTAACCACTGTA         3320           11	9841482  900-00-01-02-01-02-01-02-02-02-02-02-02-02-02-02-02-02-02-02-	Query Match         95.4%;         Score 3590;         DB 6;         Length 4136;           Best Local Similarity         99.3%;         Pred. NO. 0;         Indels         5;         Gaps         1;           Matches 367;         Conservative         0;         Mismatches         20;         Indels         5;         Gaps         1;           QY         142         CTTCAAGAACCAGAAGAAACTCAGGGAAATGACTACATTGAAAGAAA
2114 TGGAAAATGGGATTCAAGTCAATATTTAAATAATTTTATGCTGAACCCTTATCT 2473  2182 GAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAATTTTATGCCTGAAACAGGTT 2241  2474 GAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAATTTTATGCCTGAAACACAGGTT 2533  2242 TGCGCACATTGGACCATCAGAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAG 2301  2534 TGCGCACATTGGACCATCAGAAAGCAGAAGTGCTCATTTTATGCCTGAAACACAGGTT 2533  2524 TGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAG 2301  2534 TGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAA 2601  25594 TTTCAGATGTTAAGCTGGTGATGCAGATCAGTGACTCCAGAGCCA 2653  2654 AGACAGGTGGATCCTTGAGCCAGAGTTCATGCCAGTGATCCAGAGCCA 2653  2654 AGACAGGTGGATCCTTGAGCCAGGAGTTTCAGACACACAC	2661 ACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCATTTG 2720 2954 ACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCATTTG 3013 2721 CTGTATACACATTTTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCATTTA 2780 1014 ATGTGCGGAAGGGAAACAATACAACAATTCTAAGCAAAAGTCATTCTGGTGATTTTA 2780 2781 ATGTGCGGAAGGGAAACAATAGAAATTTGCAATTCTAGAAAAGTCATTTTGGTCAAATA 2840 3074 ATGTGCGGAAGGGAACAATAGAAATTTTGCAATTCTAGAAAAATTTTTACTTTTCGTC 2900 1114 ATGTCGGGAAGGAAACAATTTAGGAAAAATTTTTAGTATTAATTT 2960 1116 ATGTCGGTAGGTTTTTAGGAAATTTTAGGAAAATTTTTAATTTTTAGTT 2960 1116 ATGTCGTTTGTAGGTATTAAAATACCTTATTTGTAATAAATTTTAATTT 2960 1116 ATGTCGTTTGTAGTATAAAATACCTTATTTGTAATAAAATTTTAATTT 2960 1116 ATGTCGTTTGTAGTATAAAATACCTTATTTGTAATAAAATTTTAATTT 3253 2961 GAGTAACAATCTGGAATTATCAGAAAGCGCAAGCAATAGAAATTTTAATTTT 3253 2961 GAGTAACAATCTGGAATTATCAGAAAGCGCAAGCAATAGATAAAAATTTTAATTTT 3253 2961 GAGTAACAATCTGGAATTATCAGAAAAGCGCAAGCAATAGATAAAAAATTTTAATTTT 3323 2961 GAGTAACAATCTGGAATTATCAGAAAAGCGCAAGCAATAGATTAAAATTTTAATTTT 3253 2961 GAGTAACAATCTGGAATTATCAGAAAAGCGCAAACGAATAAAAAAATTTTAAATTTTAATTTT 3253 2961 GAGTAACAATCTGGAATTATCAGAAAAGCGCAAACGAATAAGATTAAATAAA	3021 TGGTAGAAGGAACGTTGAAATCCAAGAGCATCATGTCTTCTGGTGGTTCACCATAAGCC 3080 3314 TGGTAGAAGGACGTTGAAATCCAAGAGCATCATGTCTTCTGGTGGTTCACCATAAGCC 3373 3081 ACAGCAGATGTCTTAATCTTCCGAGATCTTTCAGCAAACCAGGATTTAAGAAAT 3140 3374 ACAGCAGATGTTTTTCCGAGATCTAGTTTTTCAGCAAACCAGGATTTAAGAAAT 3433 3141 GTAACTATCTTAATGTGGTTAATGTGGTTTATGAGTAATTTCAGCAAGCA

3600 3660

3720 3660

PRI 19-FEB-2004

```
Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Kazusa-Kamateri, Kisarazu, Chiba 292-0818, Japan (15-JUL-2003) Kazusa-Kamateri, Kisarazu, Chiba 292-0818, Japan (E-mail:genomics@hri.co.jp, Tel:81-438-52-3986) Ministry of Dapon buman cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology (RAB); cDNA library construction: Hell:Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: Reverse Protecomics Research Institute, HRI and RAB.
                                                                                                                                                                                                                                                                                                                                        CTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAATAAAGTGGCTATAAATGAA 3720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ninomiya,K., Wagatsuma,M., Kanda,K., Kondo,H., Yokoi,T.,
Kodaira,H., Furuya,T., Takahashi,M., Kikkawa,E., Omura,Y., Abe,K.,
Kamihara,K., Kateuta,N., Sato,K., Tanikawa,M., Yamazaki,M.,
Sugiyama,T., Irie,R., Otsuki,T., Sato,H., Wakamatsu,A., Ishii,S.,
Yamamoto,J., Isono,Y., Kawai-Hio,Y., Saito,K., Nishikawa,T.,
Kimura,K., Yamashita,H., Marsuo,K., Nakamura,Y., Sekine,M.,
Kikuchi,H., Murakawa,R., Kanehori,K., Takahashi-Fuji,A.,
Oshima,A., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S.,
NEDO human cDNA sequencing project
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
ACATCTTACTTGTCTCAGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCA
                                                                                                                                                                                                                                                                       CIGITCIAGAIALTIGIAGCAAIGIACCCITICCAIATITATITIGIGIGIGIGIAAGGCII
                                                                                                                                                                                    CTTTTAGTCATTATAATATTTTTGAGATTCATCTATGTTTAATGTTCTATCAGTAGTTGT
                                                                                                                                                                                                                                                                                                                   CTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAATAAAGTGGCTATAAATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens cDNA FLJ44728 fis, clone BRACE3024537.
AK126682
AK12682.1 GI:34533254
Oligo caping; fis (full insert sequence).
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/clone="RRACE3024537"
/tissue_type="cerebellum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      [Chases 1 to 4032]
Isogai, T. and Yamamoto, J.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .4032
                                                                                       3421
                                                                                                                        3481
                                                                                                                                                       3481
                                                                                                                                                                                         3541
                                                                                                                                                                                                                        3541
                                                                                                                                                                                                                                                       3601
                                                                                                                                                                                                                                                                                        3601
                                                                                                                                                                                                                                                                                                                                                      3661
                                                       3421
                                                                                                                                                                                                                                                                                                                        3661
                        3361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 2
AK126682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                     g
                                                                                                                                                   g
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                       à
                                                                                                                        ð
                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3240
                                                                                                                                                                                                                                                                                                         2580
                                                                                                                                                                                                                                                                                                                                                                                                         2700
                                                                                                                                                                                                                                                                                                                                                                                                                                          2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3360
                                                                                                                                                                                                                                                                          2580
                                                                                                                                                                                                                                                                                                                                                                         2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3181 GCTGTATAAGTGCTTTTTTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAAT 3240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3361 TGTAGTCACCTCCTTATGAAGAGACAGAACACGTACATCCTCCCAGAAAGTTCCACAGTG 3420
                                         2340
                                                                           2400
                                                                                                                                                                                                         2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTTAATAAACAGTATTGATTGGTAGAAGGAACGTTGAAATCCAAGAGCATCAATGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGGTTCACCATAAGCCACAGAGATGTCTTAATCTTTCCGAGATCTAGTTTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTGGTTCACCATAAGCCACAGCAGATGTCTTAATCTTTCCGAGATCTTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAAATGTATTCACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3121 CAAAGCAGGATTTAAGAAATGTAACTATCTTATGTGGTTATGAAGAACAATAGAATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGTATAAGTGCTTTTTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTTGAACATTTTACATTGTTTATTTTTTAATCAGTTTTACTCAAGTGTGATTATATAC
                                                                                                                                                            ATTAGGGATTTTCAACCTGTACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTCTATTCAACGAATTCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAATTTTTTATACTTTTCGTCTGCCCTTTGTAGCTGTTTTATGATATAAATACCTTATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2881 AAAAITITITACTITITGGCCTITIGTAGCTGTTTTATGATATAAATACCTTATITGT
                           2341 receastrativescalsecalseastrateriteritesseceassatricas
                                                                                                                                                                                                                                        2461 GGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTG
                                                                                                                                                                                                                                                                          GGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACACTTCCAGCTTGGGCAACAGAG
                                                                                                                                                                                                                                                                                          TGAGACCCTGTCTCAAAAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTTCAGATCTTCAG
                                                                                                                                                                                                                                                                                                                                                             TGAGACCCTGTCTCAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTTCAGATCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                         2641 ATTAGGGATTTTCAACCTGTACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTCTATTCAACGAATTCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCCTCTTGTGGTGATTTTAATGTGCGGAAGGGAAACAATAGAAATTTTGCAATTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGATATTAGCCAATTTTAGGAAAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAAGCAGGATTTAAGAAATGTAACTATCTTATGTGGTTATGAAGAACAATAGAATCATT
                                                                           TCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGCCAG
                                                                                                                                         ACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGT
                                                                                                                                                                                                          GGTGCACCCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCTCTTGTGGTGATTTTAATGTGCGGAAGGGAAACAATAGAAATTTTGCAATTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3301
                                                                                                                                                                                                                                                                                                           2521
                                                                                                                                                                                                                                                                                                                                                                                                                                          2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3241
                                                                           2341
                                                                                                                                                                                                                                                                          2521
                                                                                                                                                                                                                                                                                                                                           2581
                                                                                                                                                                                                                                                                                                                                                                          2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3001
                                                                                                                                             2401
                                                                                                                                                                                                          2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2761
                                          2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                       Ωp
                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                       gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                      g
                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                                                                                        ò
                                    g
                                                                         ò
                                                                                                        셤
                                                                                                                                           à
```

us-10-005-907-1.rge

1201   TITATGATTANGCTTGCTGTGACCCCTGTCCCCAAATGGATAAAGTAAAAGTAAACG 1260 1211   GTGACCTAACACCTCTGAGACCCCCTGTGCTCCCCTAAATGGATAAAGTAAAACG 1260 1221   GTGACCTAACACCTCTAACACCTCTTAAATATTTACAGAATTTACCCACCC
8 4 8 4 8 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8
61   GORGRANTCANAMAGNACCCAAGNAGGNAACCAAGNAGACCACACACACACAC

රු සි

```
Homo sapi
Sequence
Homo sapi
Human DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapi
Macaca fa
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapi
Homo sapi
Sequence
                                                        November 18, 2004, 12:52:13 ; Search time 15375 Seconds (without alignments) 11570.982 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX505122 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AXI26682 F
C0841482 AXI606804 F
AXC074365 F
BC0241174 F
C0842314 AXIC3798 F
AXIC3798 F
AXIC3798 F
AXIC3798 F
C0488422 &
C0488741 &
C0488741 &
C0494337 &
C0494397 &
C0494397 &
C0494397 &
C0494397 &
C0494397 &
C0494380 &
C0494380 &
C0494380 &
C0494380 &
C0494380 &
C0494380 &
C0494778 &
AXC023386 F
                                                                                                                                                                                         9053458
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                     4526729 seqs, 23644849745 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                      using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AK126682
CQ841482
AL606804
AL606804
AC074365
BC024114
CQ848137
AR123798
AR123798
AR123798
CQ488422
CQ488422
CQ488423
CQ488333
CQ484397
CQ494387
AC023386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX505122
                                                                                                                                        IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99 ba: *
99 bb. htg: *
99 bo. n: *
99 bo. n: *
99 b. pi: *
99 pl: *
99 pl: *
99 kro: *
99 kro: *
                                      OM nucleic - nucleic search,
                                                                                                                                                                                                                                                                                 GenEmbl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3762
3596.6
                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3590
3522.2
3511.6
2604.8
1673.4
1573.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1068
1068
1068
1068
1068
                                                                                                                                        Scoring table:
                                                                                                                                                                      Searched:
                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                   Database
                                                           Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         υ
```

C 20 697.8 18.5 121353 2 AC023386 21 394.2 10.5 433 6 CQ469395 22 393.8 10.5 397 6 CQ499427 24 392.2 10.4 421 6 CQ499427 25 392.2 10.4 437 6 CQ508129 27 391.8 10.4 437 6 CQ508129 28 352.2 10.4 437 6 CQ508129 29 354 9.4 70311 9 AC002390 31 342.8 9.1 74875 2 AC024682 31 342.2 9.1 404 6 CQ47828 32 342.2 9.1 400 6 CQ468549 33 342.2 9.1 401 6 CQ508110 24 342.2 9.1 401 6 CQ508110 25 38 340.6 9.1 148490 9 AL035344 26 38 340.6 9.1 169312 2 AC007484 27 300.8 8.0 190793 2 AC034298 28 300.8 8.0 190793 2 AC034298 29 300.8 8.0 190793 2 AC034581 29 295.8 7.9 191037 9 AC091561 20 44 295.8 7.9 191037 9 AC091561	G	'n	~	~	CQ499760 Sequence	7		m	0	AC002390 Human DNA	AC024682 Homo sapi	CQ477717 Sequence		_	σ	CQ508110 Sequence	AL355344 Human DNA	AC007484 Homo sapi	AC016043 Homo sapi	AL391811 Human DNA	AC034298 Homo sapi	AC093560 Homo sapi	AC090796 Homo sapi	AC091561 Homo sapi	AC018681 Homo sapi	AC004854 Homo sapi
20 697.8 18.5 121353 23 393.8 10.5 397 24.2 10.5 397 25 392.2 10.4 437 27 392.2 10.4 437 27 392.2 10.4 437 27 391.8 10.4 404 28 375 10.4 404 31 375 10.4 404 31 342.2 10.4 404 32 353.6 9.4 174875 31 342.2 9.1 401 34 342.2 9.1 401 35 342.2 9.1 401 36 342.2 9.1 401 37 342.2 9.1 401 38 340.6 9.1 168312 39 300.8 8.0 190793 41 300.8 8.0 190793 42 295.8 7.9 191855 43 295.8 7.9 191855 44 295.8 7.9 191855			CQ478563	2	CQ499760	CQ508397	CQ508729	CQ47822B	CQ469060	AC002390	AC024682	CQ477717	CQ468549	CQ498920	CQ507889	CQ508110	AL355344		AC016043	AL391811	AC034298	AC093560	AC090796	AC091561	AC018681	S
20 697.8 18.5 1 21 394.2 10.5 2 23 392.2 10.4 2 24 392.2 10.4 4 25 392.2 10.4 4 26 392.2 10.4 4 27 392.2 10.4 4 28 392.2 10.4 4 29 392.2 10.4 4 30 353.6 99.4 1 31 342.2 99.1 342	7	ø	9	9	9	9	9	9	9	σ	C)	9	φ	9	9	9	σ	~	~	6	N	6	6	6	7	6
20 21 23 23 23 24 25 25 26 27 26 27 27 28 29 29 30 31 31 32 34 35 36 37 37 37 37 37 37 37 37 37 37	~	433	397	421	437	437	437	404	446	70311	174875	359	400	401	401	401	494	6831	191161	150424	190793	ψ	168055	191037	191234	869
01222222222222222222222222222222222222		•				10.4	10.4														٠.					•
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	97	94	93	92	92	92	92	91	7	S	53.	342.8	342.2	342.2	342.2	342.2	340.6	340.6	340.6	300.8	00	00	955	ທ	95	27
	20	21	22	23	24	25	56	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41				45
	ပ									υ							υ	υ	υ		υ				U	υ

## ALIGNMENTS

AX505122 Sequence 1 from Patent W00246389. BNA linear PAT 27-SEP-2002 Sequence 1 from Patent W00246389. AX505122.1 GI:23386429 Homo sapiens (human)  I witheria; Prinatzi, G. and Binstein, R. Nocka, K., Pirozzi, G. and Binstein, R. Novel genes associated with allergic hypersensitivity and mast cell activation Patent: W0 0246389-A 1 13-UUN-2002; UCB, S.A. (BE) Location/Qualifiers 1. 3762 / organism="Homo sapiens" / mol type="unassigned DNA" / db xref="taxon:9606" 25. 432 / note="unnamed protein product" / db xref="di:23384430" / translation="MGNYLLRKLSCIGENQKKPKKONPDERRKROEMTFERKLODOD KRSQEVSSTSNQENENGSSEEVCYTVINIIPHQRSSLSSNDDGYENIDSLTRKVRQF RERSETEYALLETSVSRCSCTHEHDYEVVPPH"  1. 100.0%; Pred. No. 0; Indels 0; Gaps 0; Similarity 100.0%; Pred. No. 0; Indels 0; Gaps 0;	1 GAGAAACCGAGTCACTGTGAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
RESULT 1  AX505122 LOCUS BEFINITION Sequence 1 f ACCESSION AX505122 VERSION AX505122.1 KEYWORDS Homo sapiens CRGANISM Homo sapiens CRGANISM Homo sapiens BUKARYOTA; Mammalia; EUKARYOTA; AUTHORS NOCKA,K., Pi TILE AUTHORS OUCHALOR OUGHNAL PATENT: OUGHNAL PATENT: OUGHNAL CDS FEATURES CDS CDS CCC CCC CCC CCC CCC CCC CCC CC	Oy 1 Db 1

61

ò

Homo sapi

Sequence Sequence Sequence Sequence

inis Page Blank (uspto)

us-10-005-907-1.rnpb

```
10404 GGAGGTTGCAGTGAGCCAATACGCCATTGCACTCCAGCCTGGGCAACACAGAGAACACAGAGCAAGACA
                                               10224 CACTTTGGGAGGCCAAGGCAGGTGGATCACTTGAGGTCAGGAGTTTGAGACCCGCCTGGC 10283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10404 GGAGGTTGCAGTGAGCCAAGATTACGCCATTGCACTCCAGCCTGGGCAACAGAGAGCAAGAC
    2347 TACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCA 2406
                                                                                                                   10344 TGCCTGTAGTTCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2407 CAACACAGTGAGACCTCGTTTCTACAAATTAAAAAAATTAGCCAGGTGTGGTGGTGCT
                                                                                                                                                                              2467 CACCTGTAGTCCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGT
                                                                                                                                                                                                                                                                    2527 TGAGGCTGAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2287 TCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGCATCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2347 TACTITGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10224 CACTITGGGAGGCCAAGGCAGGTGGATCACTTGAGGTCAGGAGTTTGAGACCCGCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAACACACAGTGAGACCTCGTTTCTACAAATAAATTAAAAATTAGCCAGGTGTGGTGGTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2467 CACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10344 Teccrieractriccacciactececeaceteaceacacacaaarcecrieaacceacacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2527 TGAGGCTGAACTGAGCCAGGATCTTGCCACCACTTCCAGGTTGGGCAACAGAGTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.3%; Score 200.4; DB 14; Length 17239; 74.6%; Pred. No. 1e-28; artive 0; Mismatches 86; Indels 0; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PC007C1
CURRENT APPLICATION VIMBER: US/10/091,504
CURRENT FILING DATE: 2002-03-07
NUMBER OF SEQ ID NOS: 2442
Prior Application removed - See File Wrapper or Palm
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                            10464 TCCGTCTCRARARARARARARARGTCRGATTCTGGAG 10501
                                                                                                                                                                                                                                                                                                                                                      2587 CCTGTCTCAAAAAAAAAAAAGTTTCAGATTTTGGAG 2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10464 TCCGTCTCAAAAAAAAAAAAAAAGTCAGATTCTGGAG 10501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2587 CCTGTCTCAAAAAAAAAAAAAGTTTCAGATTTTGGAG 2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search completed: November 19, 2004, 01:44:09
Job time : 1747 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 2326, Application US/10091504; Publication No. US20030059908A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 5.3
Best Local Similarity 74.6
Matches 252; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
US-10-091-504-2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-091-504-2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 2326
TRNGTH: 17239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2407
                                        Q
                                                                                                                              g
                                                                                                                                                                                                                  q
                                                                                          ò
                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10164 TCCTTGATTAAAAGTCAGATTCTGAGGCTGAGTGTGGTGTCTCACACCTGTAATCCCAG 10223
                                                                                                                                                                                                                                                                                      1013
                                                                                                                                                                                                                                             4
                                                                                                                                                                                                                                                                                                                                                                        CITGGITICCACAACC-CCITIAITIIAGCIAAAGCAIICIITICIACIGACTICIIAAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1313 CAGGCCATGGTAAGT-----CATGTTGGCTCAGAATCAACCTCTTTAAATATT 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTITICCATTIAATGATTIATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAA 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTAAACGGTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCC 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                          935 TTTACTGCCTATTCTCTCTGAAGGCTGATGCCTGTGAACTTTGTCTTCATAACAAGAAC 876
                                                                                                                                                                                                                                                                                                                                                                                                   699 ACCTICCAIGIALIGACITAIGATITIACCIAAAATICCTGICCCTAAAAIGIACAAA 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           954 TGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2287 TCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      639 Accaargraracccreaccecrreescacacacarrircreassarcrerisassacrerece
                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                DB 13; Length 130207;
                                                                                                                                                                                                                                             16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 5.3%; Score 200.4; DB 9; Length 17239; Best Local Similarity 74.6%; Pred. No. 1e-28; Matches 252; Conservative 0; Mismatches 86; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 23.5. Application US/09764869
Patent No. US20020061521A1
Patent No. US20020061521A1
APPLICANT: ROSen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFRENCE: PCO07
CURRENT APPLICATION WUMBER: US/09/764,869
CURRENT FILING DATE: 2001-01-17
Prior application data removed - refer to PALM or file wrapper NUMBER OF SEQ ID NOS: 2442
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                         Query Match 5.3%; Score 201.2; DB 13; Length Best Local Similarity 72.2%; Pred. No. 1.7e-28; Matches 322; Conservative 0; Mismatches 108; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1362 TACAGAATTTGGGTTTTGGTTACCAA 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            519 TACAGAGCAGTAATTTGGGAGGCTAA 494
                                                          FEATURE:

NAME/KEY: misc_feature

LOCATION: (1)...(130207)

OTHER INFORMATION: n = A,T,C or G
                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo Bapiens
US-09-764-869-2326
LENGTH: 130207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
US-09-764-869-2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q ID NO 2326
LENGTH: 17239
                                                                                                                                                                                                                                                                                                                                                                                                                875
                                                                                                                                                                                                                                                                                                                                                                     1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

2346

ô

```
; LOCATION: (1)...(95960)
; OTHER INFORMATION: n = A,T,C or
US-10-087-192-1390
                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 72.2
Matches 322; Conservative
                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo Bapiens
                                                                                                                                                                                                                                     NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-087-192-1372/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                          4743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               954 TGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGAC 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4743 TTTACTGCCTATTCTCTCTGAAGGCTGATGCCTGTGAAACTTTGTCTTCATAACAAGAAC 4802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1133 TATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4921 TAAGACCTGTAA--CCACCCCTCCAAGGTATCTTGCTTCTTTAGGCTGAATCAATGTAT 4978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1253 AGTAAACGGTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCC 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGCCATGGTAAGT-----CATGTTGGCTCAGAATCAACCTCTTTAAATATTT 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5039 ACCAATGTATACCCTGACCGCCTTGGGCACACTTTCTCAGGATCTCTTGAGACTGTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5099 CAGGCCAIGGTCACTCATAIGGCACGCATAIGGGCTCAGAAIAAACCTCTIIAAAIAITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1014 CTTGGTTTCCACAACC-CCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4861 TCTTTAGACACAGTTGAACTCTTTTAACCAATTGCCAATCAGAAAATCTTAGACTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1193 ACTITICCALITAAIGATITATGICITIGCITGIAACTCCTGTCTCCCTAAAAIGIATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>accrirccargratrigacritargarritraccraaaarriccrercrerecraaaargracaaa</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 13; Length 95960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.3%; Score 201.2; DB 13; Length ilarity 72.2%; Pred. No. 1.5e-28; Conservative 0; Mismatches 108; Indels
Fublication No. US20020182586A1
GENERAL INFORMATION:
APPLICANT: Bnogalhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: CANCER
FILE REFERENCE: 5.29452001122
CURRENT FALLING DATE: 2.002-03-011
PRIOR PELICATION NUMBER: US 09/747,377
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR FILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-12-22
NUMBER OF SEQ ID NOS: 2059
NUMBER OF SEQ ID NOS: 2059
SEQ ID NO 1384
LENGTH: 95960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: CANCER FILE REPRENCE: 529452000122
CURRENT APPLICATION NUMBER: US/10/087,192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACAGAATTTGGGTTTTGGTTACCAA 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5159 TACAGAGCAGTAATTTGGGAGGCTAA 5184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 1390, Application US/10087192; Publication No. US20020182586A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                           FEATURE:

NAME/KEY: misc feature
LOCATION: (1)...(95960)

OTHER INFORMATION: n = A,T,C or G
US-10-087-192-1384
                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 322; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
US-10-087-192-1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
1014 CTTGGTTTCCACAACC-CCTTTATTTTAGCTAAAGCATTCTTTCTACTGACTTCTTAAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4861 TCTTTAGACACACTTGAACTCTTTTAACCAATTGCCAATCAGAAAATCTTAGACTCCACC 4920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1253 AGTAAACGGTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCC 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5039 ACCAATGTATACGCTGACGCCTTGGGCACACTTTCTCAGGATCTCTTGAGACTGTCCCC 5098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1073 TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAIGACCIGIAAGCICICICCIGCIICAAGAICIIGCCICIIIAAGCIGAACCGAIGIGC 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4921 TAAGACCTGTAA--CCACCCCCTCCAAGGTATCTTGCTTCTTTAGGCTGAATCAATGTAT 4978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTITICCATITAATGATTTA1GTCT1TGCTTGTAACTCCTGTCTCCCTAAAATGTATAAA 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1313 CAGGCCATGGTAAGT-----CATGTTGGCTCAGAATCAACCTCTTTAAATATTT 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      954 IGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITACTGCCTATTCTCTCTGAAGGCTGATGCCTGTGAAACTTTGTCTTCATAACAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 95960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.3%; Score 201.2; DB 13; 72.2%; Pred. No. 1.5e-28; tive 0; Mismatches 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Morris, David W.
APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS
FILE REFERENCE: 529452000122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/087,192
CURRENT FILING DATE: 2002-03-01
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR FILING DATE: 2000-12-22
PRIOR PLING DATE: 2000-12-22
PRIOR PLING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 2059
SOFTWARE: FastSEQ for Windows Version 4.00
SEQ ID NO 1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1362 TACAGAATTTGGGTTTTGGTTACCAA 1387
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR FILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-12-22
NUMBER OF SEQ ID NOS: 2059
SOFTWARE: PastSEQ for Windows Version 4.0
LENGTH: 95960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5159 racadageagraarrregeaggeraa 5184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 1372, Application US/10087192; Publication No. US20020182586A1; GENERAL INFORMATION:
```

```
2101
                                                                                                                                                                                                                                                                                                                                                                    2161
                                                                                                                                                                                                                                                                                                                                                                                                                   2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2548
                                                                                                                                                                                                                                                                                                                                            140779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               140242
                                                                                                                                                                                                                                                                                                                                                                                            140722
                                                                                                                                                                                                                                                                                                                                                                                                                                             140662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140542
                                                                                                                                                                                                                  ä
                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                               CCATACATATA---AGATATGTTGGAGATGGGACCCAAGTATAAACATAAAATTCATTTA 136195
                                                                                                                                                                                                                                                                                                                                                     TGTTTCAAAAATACCTTATACACACACCTGAAGGCAATTTTATACAACATTTTAAATAA 136135
                                                                                                                                                                                                                                                                                                                                                                                                     TITITGITICAGAAAGGAAGTITGIATACATTGAACACATAAAGTCACATAATTITCTAC 136075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       135954 TTCTTGGCTGGGCATGGTAGCTTATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCCA 135895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136370 TGACTGCCTTACAAATCAATTTGAGCTACTGTATTTACAGATTGAGTAATCCTTATCCA 136311
                                                                                                                                                                                                                                                   136310 AACTGCCTGGGACCAGAAGTGTTTCAGATTTCAGATTT-TTTTCAAATTTTGGGATATTT 136252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2547
                                                                                                                                                                           1981 IGCATICATIAIAITITITIGIAIAGTIACAGIAIACGAGIIGAGIAICCCTIAGAIG 2040
                                                                                                                                                                                                                                                                                                                                                                               TTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTA- 2279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       136014 TAGGGATGCTCAACCTGTATTTTATGGTAATAAACCGCATTTCTTTAAAAATATTGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ------GGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGAGGCTGAGGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGA
                                                                                                                                                                                                                            2041 AGAIGCTIGGGACCAGAAGIGITITIGGATITICAGATITITITIGGATITITIGGAATATIT
                                                                                                                                                                                                                                                                            CCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACAAATAATTAAAAATTAGCCAGGTGTGGTGGTGCACCACCTGTAGTCCCAGGTACTC
                                                                                                                                                       Gaps
                                                                                                                               Length 301692
                                                                                                                                                                                                                                                                                                                                                                                                                                -----TITCAAGICAGIGCICAAAAAGITICAGAIGIIAAGCI----
                                                                                                                             Score 203.8; DB 16; Length
Pred. No. 7.8e-29;
0; Mismatches 177; Indels
PRIOR APPLICATION NUMBER: 60/191,201
PRIOR FILING DATE: 2000-03-22
NUMBER OF SEQ ID NOS: 84
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 11
LENGTH: 301692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , Sequence 195, Application US/10367094
; Publication No. US20040170982A1
; GENERAL INFORMATION:
                                                                                                                           Query Match
Best Local Similarity 62.0%;
Matches 447; Conservative
                                                                           ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-428-487-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        135654 A 135654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A 2608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
US-10-367-094-195/c
                                                                                                                                                                                                                                                                                                                                                                             2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2548
                                                                                                                                                                                                                                                                             2101
                                                                                                                                                                                                                                                                                                     136251
                                                                                                                                                                                                                                                                                                                               2161
                                                                                                                                                                                                                                                                                                                                                      136194
                                                                                                                                                                                                                                                                                                                                                                                                     136134
                                                                                                                                                                                                                                                                                                                                                                                                                               2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        135834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       135714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2608
                                                                                                                                                                                               a
                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                 ΩD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

APPLICANT: David W. Morris

```
140780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GrrrGcrigicardricadadacarirragarrrraggecarrreagarrrrggar 140543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                140663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTGTTTCAGAAAGGAAGTTTGTATACATTGAACACATAAAGTCACATAATTTTCTAC 140603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGGGATGCTCAACCTGTATTTTATGGTAATAAACCGCATTTCTTTAAAAATATTGTACA 140483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1981 TGCATTCATTATATTTTTTTTTTTACAGTATACGAGTTGAGTATCCCTTAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rgrircaaaaaraccriraracacacaccrcaaccaarriraracaacarriraaaraa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -GGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140898 IGACTGCCTTACAAATCAATTTGAGCTACTGTATTTACAGATTGAGTAATCCTTATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140838 AACTGCCTGGGACCAGAAGTGTTTCAGATTTTCAGATTT-TTTTCAAATTTTGGGATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCATACATATA---AGATATGTTGGAGATGGGACCCCAAGTATAAACATAAAATTCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140482 Trctrggcrgggcarggragcrafgccrgraarcccagcactrrggaggcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           140422 GIGGATCACTIGAGGTCAGGAATICGAGACCAGCCTGACCAACATGGIGAAACCICGICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140362 CTACTAAAAATACAAAAATTAGCCAGGCATGGTGGTTGGCACCTGTAATCCCAGCGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140302 GGGAGGCTAAGGCAGGAGAATCGCTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCATACATATAATGAGAGATTGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2488 AGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGGAGGTTGAGGCTGAACTGAGCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2041 AGAIGCTIGGGACCAGAAGIGITIIGGAITICAGATITAAITITIGGATITIGGAATAITI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITIAIGCCIGAAACAGAGIITIGCGCACAIIGGACCAICAGAAAGCAGAAGIGICACIA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACAAATAATTAAAAAATTAGCCAGGTGTGGTGGTGCACCCTGTAGTCCCAGGTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 17; Length 310268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----TITCAAGICAGIGCICAAAAAGIIICAGAIGIIAAGCI-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 5.4%; Score 203.8; DB 17; Best Local Similarity 62.0%; Pred. No. 7.9e-29; Matches 447; Conservative 0; Mismatches 177;
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Therapeutic Targets
FILE REFERENCE: 529452001500
CURRENT APPLICATION NUMBER: US/10/367,094
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
US-10-087-192-1384
; Sequence 1384, Application US/10087192
                                                                                                                                                                                                                                                                                                                        TYPE: DNA
CORGANISM: Homo sapiens
US-10-367-094-195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140182 A 140182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2608 A 2608
                                                                                                                                                                                                                                                   SEQ ID NO 195
LENGTH: 310268
```

```
967 CIGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTTTCCACA 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1027 ACCCCTTTATTTTAGCTAAA-GCATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAG 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCTGTAAG 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1146 CTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAA 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAA 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601 GGCCCCCACTTTGAGATGTCCTGTCTTCAGGCTGAACCAATGTATATCTTACATGTAT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541 IGATITIAIGICITIGCITIAIAACCICIAICICCCIAAAAIGIAIAAACCATACTAAAC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACTACCTCAGGCACACTTTCTCAGGACTTCTTGAGACTGTTCCCTGGGCCATGGTCA 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660 citralciriticalcialidacical de la constanta de la constant
Sequence 31701, Application US/10027632
Publication No. US20020198371A1
Fublication No. US20020198371A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
FILE REFERENCE: 108827.129
CURRENT APPLICATION UNBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
FRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-20
PRIOR FILING DATE: 2000-07-20
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              718 TCTCCCTTAICTTAAATAAACCTTTCTTTTCTACTGACTTC--AAGTCTTATACAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778 crcrrgaaggrrgcaaccrggaggcrccrrracaaraacaagaarcrgggcrrcccac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGATTTATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTAAAAGTAAACGGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1326 GTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTT 1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCATATTGGCTCTGAATAAACCTCTTTAGATATTTTACAGAGTTTACTTT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 810;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 5.4%; Score 205; DB 13; Length 8 Best Local Similarity 73.5%; Pred. No. 3.4e-30; Matches 302; Conservative 0; Mismatches 105; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 31701, Application US/10027632
Publication No. US20030204075A9
GENERAL INFORMATION:
APPLICANT: Wang, David G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
US-10-027-632-31701/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-31701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

```
1086 CITAACICITICAACCAATTGCCAATCAGACAACTTTGAATCTACCTATGACCTGTAAG 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1146 CTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAA 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAA 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       967 CTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTTTCCACA 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601 GGCCCCCACTTTGAGATGTCCTGTCTTTCAGGCTGAACCAATGTATATCTTACATGTAT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541 IGATITIATGTTTGCTTATAACCTCTATGTCCCTAAAATGTATAAAACCATACTCTAAC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAACTACCTCAGGCACACTTTCTCAGGACTTCTTGAGACTGTTCCCTGGGCCATGGTCA 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITAACTCTITCAACCAATGGCCCAACAAAAAATCTITGAATCCACCI-CCACCTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cretrosaassariscaacerssassecreerraacaaraaaaaarersseerreese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1027 ACCCCTTTATTTTAGCTAAA-GCATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 11. Application US/10428487
Publication No. US2004006780A1
GENERAL INFORMATION:
APPLICANT: RASTELL, LUCA K.
APPLICANT: GERBER, HANS-PETER
TITLE OF INVENTION: VEGF-MODULATED GENES AND METHODS EMPLOYING THEM
FILE REFERENCE: 09800086-0103
CURRENT FILING DATE: 2003-05-02
PRIOR APPLICATION NUMBER: US/10/428,487
PRIOR FILING DATE: 2001-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1326 GICAIGIIGGCICAGAAICAACCICIIIAAAIAIITIACAGAAIIIGGGII 1376
       INVENTION: Identification and Mapping of Single Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCATATTGGCTCTGAATAAACCTCTTTAGATATTTTACAGAGTTTACTTT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 205; DB 15;
Pred. No. 3.4e-30;
0; Mismatches 105;
TITLE OF INVENTION: Identification and Mappin TITLE OF INVENTION: Polymorphisms in the Hun CHERRENT APPLICATION NUMBER: US/10/027,632 CURRENT FILING DATE: 2002-04-30 PRIOR PRIOR PELING DATE: 2000-07-12 PRIOR FILING DATE: 2000-07-12 PRIOR FILING DATE: 2000-07-12 PRIOR FILING DATE: 2000-04-20 PRIOR FILING DATE: 2000-04-20 PRIOR FILING DATE: 2000-03-29 PRIOR FILING DATE: 2000-03-29 PRIOR FILING DATE: 2000-02-24 PRIOR FILING DATE: 1999-10-24 PRIOR FILING DATE: 1999-11-23 PRIOR FILING DATE: 1999-10-24 PRIOR FILING DATE: 1999-10-28 PRIOR FILING DATE: 1999-09-28 PRIOR FILING DATE: 1999-09-28 PRIOR FILING DATE: 1999-09-28 PRIOR FILING DATE: 1999-09-28 PRIOR FILING DATE: 1999-09-09 NUMBER OF SEQ ID NOS: 325720 SOFTWARE : BASESEQ for Windows Version 4.0 SEGNITH: 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.4%;
ilarity 73.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 302; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-027-632-31701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
US-10-428-487-11/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

g  $\stackrel{>}{\circ}$ Ωp ò П \$ g

8

Ś

ઠે 임

```
51196
                                 17595 CITCIAICTCCCTAAAATGTATAAAACCAGGCTGAAACCTGACCACCTCGGGCCCACGIT 17536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGAATAAACCTCTTTAAGTATTTTACAGAGTTTGTTTTCTTCTGTTAACAAAGAGAGTG 50838
                                                                                                                                                             17535 CTCAGGACCTCTTGATATTGTTCCCCAGGTCAATATGGTCACTCATATTGGCTCACAATA 17476
CTCCTGTCTCCCTAAAATGTATAAAAGTAAACGGGGCACCTGACCTCAGGCACACTTT 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51017 TTTGCTTGTAACTCCTGTCTCTCTGAAATGTGTAAAACCAAACGAAACGGAACTGGACCACCTA
                                                                                                           CTCAGGACCTCCTGAGAGTGTATCCCAGGCC---ATGGTAAGTCATGTTGGCTCAGAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51137 AATAAAAATATCTTTGAATCTACCTAAGACCTGTAAGCACCCCCACCCTCCAAGCCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1077 CAAGATATCCCACCTGTTTAGGCTGAACCAAGGTATACCTTCTGTGTATTGAGTTATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAAGTAAACGGTGACCTGACCACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      50957 GGGCGAGCTTTCTCAGGACCTCATGAGACTGTTCCCTGGCCCATGGTCACTTACACTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1337 TCAGAATCAACCTCTTTAAATATTTTTACAGAATTTGGGTTTTGGTTACCAATAAGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51252 GAGGCTTCATCTACATAACAAGAACCTTGGCCTCCACAA---CTGTCCTTTGTCTTAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1049 ATTCTTTCTACTGACTTCTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCAGACAAAACTTTGAATCTACCTATGACCTGTAAGCTCTCTCCTGCTTCAAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1277 AGGCACACTITICICAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAAGTCATGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----ATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAATGATTTATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.5%; Score 207.4; DB 13; Length 63313;
llarity 72.7%; Pred. No. 7.7e-30;
Conservative 0; Mismatches 101; Indels 17;
                                                                                                                                                                                                                                          AACCICITIAAAIAITITACAGAAITITGGGITTIGGITACCAA 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: NOVEL CONCER.
FILE REPERENCE: 529452000122
CURRENT APPLICATION NUMBER: US/10/087,192
CURRENT FILING DATE: 2002-03-01
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR APPLICATION NUMBER: US 09/798,586
PRIOR FILING DATE: 2000-12-22
PRIOR PILING DATE: 2000-03-02
NUMBER OF SEC ID NOS: 2059
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 526, Application US/10087192; Publication No. US20020182586A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      50837 TGATAATTATTÜ 50825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1397 ACAAATATATGTC 1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 315, Conserv
                                                                                                                                                                                                                                                                                                                                                                            US-10-087-192-526/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-087-192-526
     1228
                                                                                                           1288
                                                                                                                                                                                                                  1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                         셤
                                                                                                         ò
                                                                                                                                                        g
                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17655 GCCTTTCTGGGCTGAACCAAAGTAAACCATCCATATATTGATTCATGTCTTTGCCTGTAA 17596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              989 GAGACTTTGTCTACATAACAGAGACCTTGGTTTCCACAA-CCCCTTTATTTTAGCTAAAG 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAATCAGACAAACTTTGAATCTACCTATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTT 1167
                                                                                                                                                                                                                                             2385
                                                                                                                                                                                                                                                                                                                                                    GGAGTITGAGGCCAGACTGCACACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAA 2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTAGCCAGGTGTGGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAG 2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTTCCA 2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACCAATTGC 1107
                                                          694 CAGTGCGTTTTATA--TTTCTGTGTAAACAAAGTTTGCGTACATTGAACCAT-GGAAAG 638
                                                                                                                                                                                                                                                                                                                                                                                          GGAGTITIGAGACCAGCCTGGGCAACATGGCAAAACCCTCTCTCTAAAAAAT--ACAAG 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            467 TTTGCCAGGTGTGGTAGCAWGTGCCTGTAGTCTCAGGTCTTCAGGCGGCTGGGGTGGGAG 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATTGCTTGAGCCCCAGAAAGTGGAGGCTGCAGTGAGCCGAGATGGCAGCACCACTCCCCG 348
                                                                                                                                                                                      637 CAAAGGTGTCAC-----GCTGGTATTGAAAAAGTTTCAGATTCTAGCCAGCCACGT 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAATGATTTATGTCTTTGCTTGTAA
                                                                                                                                                                                                                                        2326 AGTICATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCA
                                                                                                                                                                                                                                                                                            Gecreaagecadragecacrerageagecreagecagearccrraagececa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17112 CAATCAAAACCTCTTTGAATCTGCCTATGGTCTATAAGC---CCCACTTCAAGAAGCCCT
                                                                                                                                    CAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
5.5%; Score 207.4; DB 17; Length 58320;
Best Local Similarity 76.4%; Pred. No. 7.4e-30;
Matches 308; Conservative 0; Mismatches 86; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
US-10-322-281-88/C
10-322-281-88/C
5 Sequence 88, Application US/10322281
5 Publication No. US20040126762A1
5 GRERAL INFORMATION:
APPLICANT: David W. Morris
7 APPLICANT: Marc S. Malandro
7 TITLE OF INVENTION: Novel Compositions and Methods in Cancer
7 FILE REFERENCE: 529452001000
CURRENT APPLICATION NUMBER: US/10/322,281
7 CURRENT FILING DATE: 2002-12-17
7 NUMBER OF SEQ ID NOS: 866
7 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATTICAGAICTICAGATIAGGGATITICAACCIGIACT 2663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              certricagaaritrigaaritaggerecreaaccieraar 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      58320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-322-281-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1168
                                                                                                                                    2266
                                                                                                                                                                                                                                                                                                                                                 2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1048
                                                                                                                                                                                                                                                                                               585
                                                                                                                                                                                                                                                                                                                                                                                                   525
```

ద

임 à 원 ò

ઠે

```
2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2086 GATTTTGGAATATTTCCATACATATAATGAGAGGTTGGAAAATGGGATTCAAGTCTAAT 2145
CAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGC 2325
                                                                                                                                                                                                                                                        GGAGTTTGAGGCCAGACTGCACACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAA 2445
                                                                                                                                                                                                                                                                                                                                                                                         2446 TTAGCCAGGTGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAG 2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCA 2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2146 CATAAAATTCACTTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATA 2205
                                                                                                                                                                                                                                                                                                    407 GATTGCTTGAGCCCAGAAAGTGGAGGCTGCAGTGAGCCGAGATGGCAGCACTGCTCTCTCCG 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAAGGTGTCAC-----GCTGGTATTGAAAAGTTTCAGATTCTAGCCAGGCACCGT 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                       467 TTTGCCAGGTGTGGTAGCAWGTGCCTGTAGTCTCAGGTCTTCAGGCGGGCTGGGGGGG 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       812 GATTTTGGAATGTTCTCGCATACATAGTAAGATGTTTGGGGATGTGACATAGGGTCTAAA 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCHERALL INVERMINON:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide

TITLE OF INVENTION: Polymorphisms in the Human Genome

TITLE OF INVENTION: Polymorphisms in the Human Genome

FILE REFERENCE: 108627.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR PILING DATE: 2000-07-12

PRIOR PILING DATE: 2000-03-29

PRIOR PILING DATE: 2000-03-29

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/195,218

PRIOR APPLICATION NUMBER: US 60/195,363

PRIOR PILING DATE: 1999-11-23

PRIOR PILING DATE: 1999-11-23

PRIOR PILING DATE: 1999-11-23

PRIOR PILING DATE: 1999-09-28

PRIOR PILING DATE: 1999-09-09

NUMBER OF SEQ ID NOS: 325720

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 125465

LENGTH: 830
                                                                                                                                                                                       GGCTCAAGCCAGTAATCCCAGCACTGTAGGAGGCTGAGGCAGGAGGATCCCTTGAGCCCA
                                                                                                                             2326 AGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATTICAGAICTICAGAITAGGGAITTICAACCIGIACT 2663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             certricadartringgatradegrecreaaccretaar 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.0%; Score 224.6; DB 15;
68.9%; Pred. No. 4.9e-34;
tive 0; Mismatches 164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 125465, Application US/10027632 Publication No. US20030204075A9 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 399; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-027-632-125465
                                                                                                                                                                                                                                                           2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2625
2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        752
                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                          g
                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dp
Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                        셤
                                                                                                         충
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                     187515 Argeorgramicecagractringgaggeceagecagecagaricecreagercaggagr 187456
                           187575 TTTCAAAATAGAGTGCATTACTGGTAAAAAAACAGTTGAAGGGCTGGATACGGTGGCTC 187516
                                                                                                                                                                                                                                                               187395 CAGGCATGGTGGTGCGTGCCTGTAATCCTAGCTACTCAGGAGGTTGAGGCAGGAGGATCA 187336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               187335 CTTGAACCCAGGAGACGGAGGTTGCAGTGAGCCGACACAGTGCCACTGCACTCCAGCTG 187276
                                                                                                                                                                                                                                                                                                                                                       CAGGIGIGGIGCACACCIGIAGICCCAGGIACICAGGAGGCIGAGGIAGIAGIAGAITG 2510
                                                                                                                                                                                                                         TTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGC 2450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2511 TITGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACCACTTCCAGCTTG 2570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2086 GATITIGGAATATITCCATACATATAATGAGAGTIGGAAAATGGGATICAAGTCTAAT 2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2146 CATAAAATTCACTTAIGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATA 2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2206 CAATATTTTAAATAATTTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAG 2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                812 GATTTTGGAATGTTCTCGCATACATAGTAAGATGTTTGGGGATGTGACATAGGGTCTAAA 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              752 CAAGAAGCTCA--TITGITICATATACACCTTATICACATAGCCTGAAAGTAGTCTTACG 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTGCGTTTTATA--TTTCTGTGTGAAACAAAGATTGCGTACATTGAACCAT-GGAAAG 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | JERUSHAL INCHARATION:
| JENERAL | WANG, David G. |
| TITLE OF INVENTION: Identification and Mapping of Single Nucleotide |
| TITLE OF INVENTION: Identification and Mapping of Single Nucleotide |
| TITLE OF INVENTION: Identification and Mapping of Single Nucleotide |
| FILE REFERENCE: 108827.128 |
| CURRENT APPLICATION NUMBER: US 60/218,006 |
| PRIOR APPLICATION NUMBER: US 60/198,676 |
| PRIOR FILING DATE: 2000-09-29 |
| PRIOR FILING DATE: 2000-03-29 |
| PRIOR FILING DATE: 2000-03-29 |
| PRIOR FILING DATE: 2000-02-24 |
| PRIOR FILING DATE: 1999-11-23 |
| PRIOR FILING DATE: 1999-03-28 |
| PRIOR FILING DATE: 1999-03-38 |
| PRIOR FILING DATE: 1999-03-28 |
| PRIOR FILING DATE: 1999-03-28 |
| PRIOR FILING DATE: 1999-03-38 |
| PRIOR FILING DATE: 199
                                                                                           ATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 13; Length 830;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6.0%; Score 224.6; DB 13; Length 68.9%; Pred. No. 4.9e-34; ive 0; Mismatches 164; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187275 GGCGACAGAGTCACTCTGTCTCAAAAAAAAAAAAGA 187238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5-10-027-632-125465/c
Sequence 125465, Application US/10027632
Publication No. US20020198371A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 399; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OKGANISM: HUMBII
US-10-027-632-125465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Human
                                                                                           2331
                                                                                                                                                                                                                         2391
                                                                                                                                                                                                                                                                                                                                                       2451
                                                                                                                                                                                                                                                                                                                                                                                                                 a
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
```

Sequence 1372, Ap Sequence 2326, Ap Sequence 2326, Ap Sequence 2326, Ap Sequence 274, App Sequence 19728, A Sequence 236, App Sequence 236, App Sequence 6057, App Sequence 6057, App Sequence 86, App Sequence 169, App Sequence 2670, App Sequence 269156, Sequence 260156, Sequence 260156,

Sequence:

Run on:

Searched:

Database

Sequence 29373, A Sequence 29373, A Sequence 265848,

Sequence

Sequence Sequence

```
APPLICANT: Union Chimique Belge, S.A.
APPLICANT: Union Chimique Belge, S.A.
APPLICANT: Union Chimique Belge, S.A.
APPLICANT: No. US20030166881Alka, Karl
APPLICANT: Pirozzi, Gregory
APPLICANT: Einstein, Richard
TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST
TITLE OF INVENTION: ACTIVATION
TITLE OF INVENTION: ACTIVATION
TITLE OF LILIGO DATE: 20112-07
CURRENT FILLING DATE: 20112-07
SUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin version 3.1
       Query Match
Best Local Similarity 100.0%; Pred. No. 0;
Matches 3762; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/10005907 Publication No. US20030166881A1 GENERAL INFORMATION:
           17239
17239
17239
181259
73145
                                                                                                                                                                                                                                                                         54169
8207
                                                                                                                                                                           66686
166043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (25)..(432)
OTHER INFORMATION:
           \\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 1
LENGTH: 3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -10-005-907-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-005-907-1
                                                                                                                                                                                          197
196.8
196.2
                                                                                                                                                                                                                                                                         2000.4
11999.6
11999.6
11999.2
11997.4
11997.4
11997.4
11997.4
11997.4
Sequence 800, App
Sequence 125465,
Sequence 125465,
Sequence 31701, App
Sequence 31701, A
Sequence 11, Appl
Sequence 11, Appl
Sequence 115, App
Sequence 139, App
Sequence 1384, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Appli
                                                                                                        (without alignments)
11676.296 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                             ; Search time 1741 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                        Published Applications Nat.

(gnz_6/ptodata//pubpna/US07 PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US07 NEW_PUB.seq:*
(cgnz_6/ptodata//pubpna/US06 NEW_PUB.seq:*
(cgnz_6/ptodata//pubpna/US06 PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US07 NEW_PUB.seq:*
(cgnz_6/ptodata//pubpna/DS07 NEW_PUB.seq:*
(cgnz_6/ptodata//pubpna/US08 NEW_PUB.seq:*
(cgnz_6/ptodata//pubpna/US08 NEW_PUB.seq:*
(cgnz_6/ptodata//pubpna/US08_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US08_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US09_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US09_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US09_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US09_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US09_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US09_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US10B_PUBCOMB.seq:*
(cgnz_6/ptodata//pubpna/US60_PUBCOMB.seq:*
            GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-005-907-1
US-10-322-281-800
US-10-027-622-125465
US-10-027-622-125465
US-10-322-281-88
US-10-087-122-526
US-10-027-632-31701
US-10-027-632-31701
US-10-428-487-11
                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                               3627888 segs, 2701811610 residues
                                                                                           November 18, 2004, 18:25:09
                                                                                                                                                                                                                                                                                                                                                                                                  Published Applications NA:
                                                                                                                                                                                                                                                                                                                                                                       Listing first 45 summaries
                                                                 - nucleic search, using sw model
                                                                                                                                                                                                       IDENTITY NUC Gapoxt 1.0
                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0% Maximum Match 100%
                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               115
113
113
113
114
115
117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВВ
                                                                                                                                                  US-10-005-907-1
3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3762
191584
830
830
58320
633120
63313
3101692
3101692
310268
95960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3762
234.4
2224.6
2224.6
207.4
207.4
205
203.8
201.2
201.2
                                                                                                                                                                Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                 OM nucleic
```

ö

Gaps

0

DB 15; Length 3762;

09 9 GAGAAACCGAGTCACTGTGAAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCTG 1 GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG

ò a ò

US-10-367-094-195 US-10-087-192-1384 US-10-087-192-1390

Regult No.

0 0 0 0 0 0 0 0 0

..... rage Blank (uspto)

Query Match 10.4%; Score 392.2; DB 5; Length 437; Best Local Similarity 99.2%; Pred. No. 1.5e-47; Matches 394; Conservative 0; Mismatches 3; Indels 0; Gaps 0;		41 CGAGGTACTGGATATTTTTGCATAJAAACTTGCAGTAATAGTTCAAAAATTAATAGTTT 100	TGACATTGGGTTTTCTGAGAAAGAGAATTGAAAGTGTCACAAAATAAAAAAAGATGAAAT	1691 GAAGCATATATATTGTCAATTTTTCAATTTTTCTAGTCAACAGAAATCGAAGGATTCT 1750	161 GRAGCATATATATATGTCAATTTTTTCAATTTTTCTAGCCAACAGAGAATCGAAGGATTCT 220	1751 GTTCAAATATTAGTAAAAAATTGAAAATAAACTTGTGCTTATATTTTGCAACACACA 1810	221 GTTCAATATTAGTAAAATTGAAAATAAACTTGTTGTTTTGTTTG	1811 AGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTT 1870	281 AGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTGTTTTTTGGTTTT 340	1871 AAAATTCAAGCAAACTGGAAAATAATCCATCTAATTATGCTTTCTTT	341 AAAATTCAAGCAAACTGGAAAATAATCCATCTAATTATGCTTTCCCAAGAAGTTT 400	1931 TTAATGATATGCAGCTTCCTAATTTGGAGACAAAAG 1967	401 TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAG 437	
OWE	ò	a è	5 A	ò	Ω	ò	qq	ò	Ωp	ò	Ωp	δ	рр	

Search completed: November 18, 2004, 14:08:43 Job time : 1658 secs

1810

1930

400

셤

```
The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer; (b) monitoring the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call carcinogenic potential of a compound; (g) determining whether prostate cancer massessing the aggressiveness or indolence of prostate cancer in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, prostate cancer, cytostatic, carcinogen, pharmacodyanamic marker, pharmacogenomic marker, gene, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                 GITCAAATAITAGIAAAAAITGAAAAIAAACITGIGCITAAIAITITGITIGCAACACACI
                                      281 AGTIAATTIAACCIGIGACIAGTIAICICIACCGAAGGIGGAIGIGIAGITICIGGIIIT
                                                                                                                                                                                useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                  <u>AGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 437 BP; 150 A; 63 C; 79 G; 145 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                 TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAG 1967
                                                                                                                                                                                                                                                                                       TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAG 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human prostate expression marker cDNA 40236.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 8129; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monahan
                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0189862P.
2000US-0207454P.
                                                                                                                                                                                                                                                                                                                                                                                                        ABV40245 standard; cDNA; 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0211314P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0219007P
2000US-0255281P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Endege WO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200160860-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ч,
                   1751
                                                         221
                                                                                                  1811
                                                                                                                                                                                                                                                                 1931
                                                                                                                                                                                                                                                                                                        401
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV40245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Schlegel
                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                         ABV40245
                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                   g
                                              q
                                                                                             ò
                                                                                                                                                                                8
                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer; (b) monitoring the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; determining whether prostate cancer has metastasized in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGACATTGGCTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAAAAAAAGATGAAAT 1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGACATTGGCTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAAATAAAAAAAGGTGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGCATATATATATGTCAATTTTTTTCAATTTTTTCTAGCCAACAGAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGCATATATATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 5; Length 437;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 437 BP; 150 A; 63 C; 79 G; 145 T; 0 U; 0 Other;
376 TIAAIGAIAIGCCAGCIICCIAAIIIGGAGACAAAAGCCIIAAIIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 392.2; DB 5;
Pred. No. 1.5e-47;
0; Mismatches 3;
                                                                                                                                                                                                                           Human prostate expression marker cDNA 31600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 6790; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Monahan JE;
                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 99.2%;
Matches 394; Conservative (
                                                                                                  ABV31609 standard; cDNA; 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US005171
                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Endege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                                                                                   WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                20-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                L6-MAR-2000;
                                                                                                                                                                                   16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                        23-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                          ABV31609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schlegel
                                                         RESULT 14
                                                                              ABV31609
```

a

ò

gg

ò

ò

```
WO200160860-A2
                                                                                                                                                           09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                Homo sapiens
                                                                                                                       17-FEB-2000;
                                                                                                                                  16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                                                                                           Schlegel R,
                                                                    23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1751
 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1932
                                                                                                                                                                  The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a text compound to inhibit prostate cancer in a patient; d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
                                                                                                       prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer, stage of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GIGCTTATATTTTGTTTGCAACACACTAG
                                                                                                                                                                                                                                                                                                                                                                                                                              1573 ATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1633 ACATTGGCTTTTCTGAGAGAGAAATTGAAAGTGTCACAAAATAAAAAAAGATGAAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 AGCATATATAATTGTCAATTTTTTCAATTTTCTAGCCAACAGAGATCGAAGGATTCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 TTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCATATATAATTGTCAATTTTTCAATTTTTCTAGTCAACAGAATCGAAGGATTCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated nucleic acid molecule associated with cancerous state prostate cells and correlating with presence of prostate cancer, usef
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                         also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                          Query Match 10.5%; Score 393.8; DB 5; Length 397; Best Local Similarity 99.5%; Pred. No. 8.8e-48; Matches 395; Conservative 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                               Sequence 397 BP; 142 A; 53 C; 64 G; 138 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCC 1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361 AATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCC 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human prostate expression marker cDNA 31267
            MILL-) MILLENNIUM PREDICTIVE MEDICINE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAAATATTAGTAAAATTGAAAATAAACT
                                                                                                                                               Claim 1; Page 1680; 11750pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV31276 standard; cDNA; 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                 WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1933
                                     Schlegel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABV31276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXXEXEX
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
```

```
1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       determining whether prostate cancer has metastasized in a patient, (h) assessing the aggressiveness or indolence of prostate cancer in a patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1631 TGACATTGGCTTTTCTGAGAGGAATTGAAATTGAAAGTGTCACAAAATAAAAAAAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAATTCAAGCAAACTGGAAAATAATTCCATCTAATTTATGCTTTTCTTTTCCCAAGAAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGACATTGGCTTTTCTGAGAGAGAATTGAAAGTGTCTCACAAATAAAAAAAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAGCATATATATTGTCAATTTTTCAATTTTTCTAGTCAACAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGCATATATAATATGTCAATTTTTTCAATTNTCTAGCCAACAGAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GITCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTTGCAACACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTTCTGGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTCAATTTAACCTGTGACTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAGGTACTTTATATTTTTGCATATAAACTTGCAGTATTTGTTCAAAAATTAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 421;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTG 1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 421 BP; 143 A; 61 C; 71 G; 145 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
10.4%; Score 392.2; DB 5
Best Local Similarity 97.8%; Pred. No. 1.5e-47;
Matches 397; Conservative 0; Mismatches 9
                                                                                                                                                                                                                                                                                                                             (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 6740; 11750pp; English.
                                                                                                         2000US-0189862P
2000US-0207454P
                                                                                                                                                                          2000US-0211314P.
2000US-0219007P.
2000US-0255281P.
20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                     ĕ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-662795/76
```

12

ò

g

ò

d

8

Ωp

à

g ò g

à

Dp

 $\ddot{\circ}$ 

ò

```
1690
                                                                                                                                                                                                                                                                                                                    1750
                                                                                                                                                                                                                                                                                                                                                                   1810
                                                                                                                                                                                                                                                                                                                                                                                                                  1870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1930
a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call carcinoganic potential of a compound; (g) determining whether prostate cancer as metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                          154
                                                                                                                                                                                                                                                                                                                                          214
                                                                                                                                                                                                                                                                                                                                                                                            274
                                                                                                                                                                                                                                                                                                                                                                                                                                          334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            394
                                                                                                                                                                                                                                         94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                             CGAGGTACTGGATATTTTTGCATATAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                GAAGCATATATAATTGTCAATTTTTTCAATTTTCTAGCCAACAAGAATCGAAGGATTCT
                                                                                                                                                                                                               CTATGTACTGGATATTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                GAAGCATATATAATTGTCAATTTTTCAATTTTTCTAGTCAACAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                  AGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                   275 AGTIBATITAACCIGIGACIAGITAICICIACCGAAGGIGGAIGIGIAGITICIGGITIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
                                                                                                                                                                Length 433;
                                                                                                                                                                                          Indels
                                                                                                                                         Sequence 433 BP; 146 A; 64 C; 79 G; 144 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                               Score 394.2; DB 5;
Pred. No. 7.6e-48;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human prostate expression marker cDNA 10430.
                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
2000US-0255281P.
                                                                                                                                                               10.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; cDNA; 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                         Conservative
                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200160860-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                           Local Simi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-AUG-2001
                                                                                                                                                                                                               1571
                                                                                                                                                                Match
                                                                                                                                                                                                                                        35
                                                                                                                                                                                                                                                               1631
                                                                                                                                                                                                                                                                                         95
                                                                                                                                                                                                                                                                                                                  1691
                                                                                                                                                                                                                                                                                                                                         155
                                                                                                                                                                                                                                                                                                                                                                  1751
                                                                                                                                                                                                                                                                                                                                                                                         215
                                                                                                                                                                                                                                                                                                                                                                                                                1811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV10439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV10439;
                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
   8888888888888
                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                   QC
                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     염
                                                                                                                                                                                                                          420
                                                  341
                                                                                                                           300
                                                                                                                                                  461
                                                                                                                                                                           360
                                                                                                                                                                                                                                                                           480
                                                                                                  401
                                                                                                                                                                                                  521
                                                                                                                                                                                                                                                  581
                                                                                                                                                                                                                                                                                                   641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer; cytostatic; carcinogen; pharmacodyanamic marker;
marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prostate cancer, useful e of prostate cancer.
                                             ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                      CTTAGGACTICTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                        ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                        ACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                        ACTICTAATCAGGAAAAACGAGAATGGCAGTGTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                                                        AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT
                                                                                                                                        GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                              GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                              crraceacricitatiagradecerrerrecrececercareaceargarrangaagricie
                                                                                                                                                                                                                                                                      TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated nucleic acid molecule associated with cancerous state prostate cells and correlating with presence of prostate cancer, usef for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                          506
                                                                                                                                                                                                                                                                                                                                                  667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       expression marker cDNA
                                                                                                                                                                                                                                                                                                                                        TAGCAGACTCTGGCGAAGTTGTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monahan JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 295; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
                                                                                                                                                                                                                                                                                                                                                                                                           ABV01270 standard; cDNA; 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0255281P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W
W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Endege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; prostate
pharmacogenomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAY-2000;
09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>م</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-AUG-2001
                       121
                                                282
                                                                       181
                                                                                                342
                                                                                                                       241
                                                                                                                                              402
                                                                                                                                                                                              462
                                                                                                                                                                                                                                                522
                                                                                                                                                                       301
                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                582
                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schlegel
                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV01270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MILL-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ношо
```

```
2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2457
                                                                                                                                                                                                                                                                                                                                                                                     2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cagacrigcacaacacacrigagaccricgrircricaarraarraaaaarragccaggrig 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTGCTGCACCCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTGAG 2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG 1082
                                                                                                                   1917
                                                                                                                                                                                    1977
                                                                                                                                                                                                                                                                                                                     2097
                                                                                                                                                                                                                                                                                                                                                      662
                                                                                                                                                                                                                                                                                                                                                                                                                        722
                                                                                                                                                                                                                     542
                                                                                                                                                                                                                                                                                     602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             962
                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               biodiversity assessment; Parkinson's disease; Alzheimer's disease; neurodegenerative diseases; anaemia; platelet disorder; wound; burns; ulcers; osteoporosis; autoimmune disease; cancer; molecular weight marker; food supplement; antiparkinsonian; nootropic; neuroprotective; antianaemic; anticoagulant; thrombolytic; vulnerary; antiulcer; osteopathic; immunosuppressive; antinflammatory; cytostatic;
Transfitusataracaccitarcisaarasccisaagstaarititaracaaratitiraaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTTCAAGTCAGTGCTCAAAAGTTTCAGATGTTAAGCTGGTGATGTTCATGCCAG
                                                                                                                                                                                    CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                    543 CAATGCATTCATTATATATTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                      ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTTGGATTTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                       TITCCATACATATAATGAGAGTTGGAAAATGGGATTCAAAGTCTAAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                        TITCCATACATAATGAGAGATTGGTAAATGGGATTCAAGTCTAAATCATAAGATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATITICAAGTICAGTICTICAAAAGTITICAGATIGITAAGCTIGGTGATGCAGTTICATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGT
                                                    TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                363 Trigcaacacacragriaarriaaccrafacragriarcraccaacarargraf
                                                                                                                     CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                      CAATGCATTCATTATATATTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                       ATGAGA TGCTTGGGACCAGAAGTGTTTTGGATTTCAGATTTATTTTTGGATTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; diagnostic; drug screening; forensics; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1083 Actescacerreacecreaacreacecaccarcriccaccacca 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human novel cDNA sequence, SEQ ID NO:842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADC30760 standard; cDNA; 667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-DEC-2003
                   303
                                                                                                                                                      423
                                                                                                                                                                                     1918
                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                        1978
                                                                                                                                                                                                                                                                                                                       2038
                                                                                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                                                                                                                          663
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1023
                                                                                                                      1858
                                                                                                                                                                                                                                                                                                                                                                                           2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADC30760
                                                    1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADC30760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                  g
                                                                                                                      ò
                                                                                                                                                    셤
                                                                                                                                                                                     ò
                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                    ò
```

```
The invention relates to 971 novel human cDDNA sequences (ADC29919-CC ADC30890-ADC31860). The invention also relates to nucleic acid sequences over 99$ identical with the novel human cDNAs. The inventionally encompasses expression vectors and host cells comprising a nucleic acid of the invention; the recombinant production of a polypeptide of the invention; an antibody against a polypeptide of the invention; an echod of detecting complements of polymorleotides or polypeptides of the invention; and methods of invention discloses methods of the invention. The invention further discloses methods of polymorleotide probes and/or monoclonal antibodise for earrying out the methods of the invention or activity of the identification of compounds that modulate the candyor monoclonal antibodise for earrying out the methods of the invention or activity of the polymorleotide and/or polypeptide; and 767 contig sequences corresponding to the cDNA sequences of the invention or ADC31861-ADC32627) and the polypeptides encoded by the contigs (and secretarial in diagnostics, drug screening, forensics, genetic disorders or other tratis, for assessing biodiversity, and in producing many other types of disease and other neurodegenerative diseases, anomania, platelet calso used for treating diseases when a producing may also he used a shybridisation probes or cancer. The nucleic acids may also be used as hybridisation probes or cancer. The nucleic acids may also be used as hybridisation probes or cancer. The nucleic acids may also be used as hybridisation probes or cancer. The nucleic acids may also be used as hybridisation probes or cancer. The nucleic acids may also be used as hybridisation probes or cancer. The nucleic acids may also be used as hybridisation probes or cancer. The nucleic acids may also be used as hybridisation probes or cancer are also useful in generating antibodies, as encoded an epichemial services.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and as food supplements. The present sequence represents a specifically calined human cDNA sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polynucleotide and polypeptide useful for diagnosing, preventing or treating conditions such as neurodegenerative diseases, anemias, platelet disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                     Wehrman T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 667 BP; 216 A; 147 C; 154 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                          Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13.5%; Score 506; DB 10; 100.0%; Pred. No. 6.8e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·
                                                                                                                                                                                                                                                                                                                       AJ, Zhao QA,
, Asundi V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ilarity 100.0%; Pred. No. 6.8
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 842; 1185pp; English.
gene therapy; chromosome 1; gene; ss.
                                                                                                                                                                                                                                                                                                                     Tang TY, Zhang J, Ren F, Xue AJ,
Zhou P, Ghosh M, Wang D, Ma Y,
Haley-Vicente D, Drmanac RT;
                                                                                                                                                                                 24-SEP-2002; 2002WO-US030474.
                                                                                                                                                                                                                                 24-SEP-2001; 2001US-0324631P
                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-371981/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 506; Conserv
                                                                                                                                                                                                                                                                              HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB; ADC31731
                                                                                             WO2003029271-A2.
                                               Homo sapiens.
                                                                                                                                           10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer.
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

ö

221

cytostatic; carcinogen; pharmacodyanamic marker; gene; se.

prostate expression marker cDNA 26644

Нишап

Human; prostate cancer; pharmacogenomic marker;

```
1917
                                                                                                                                                                                                                                              2037
                                                                                                                                                                                                       1977
                                                                                                                                                                                                                                                                                       2097
                                                                                                                                                                                                                                                                                                                              2157
                                                                                                                                                                                                                                                                                                                                                                      2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2457
                                                                                                   362
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATTICAAGICAGIGCICAAAAAGITICAGAIGITAAGCIGGIGAIGCAGIICAIGCAG 2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                          662
                                                                                                                                          422
                                                                                                                                                                                   482
                                                                                                                                                                                                                                                                  602
                                                                                                                                                                                                                                                                                                                                       962
                                                                                                                                                                                                                                                                                                TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
          243 AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                            ATCGAAGGATTCTGTTCAAATTTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAATAAACTTGTGCTTATATTTTG
                                                                                                                     TITGCAACACACTAGITAATITTAACCIGTGACTAGITAICICTACCGAAGGTGGATGIGT
                                                                                                                                   AGTITICTIGGITITTAAAATTICAAGCAAACTIGGAAAATAATICCATCTAATTATGCTTTICTTT
                                                                                                                                                                          CCCAAGAAGTITITIAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                     CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                            CAATGCATTCATTATATTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                               543 CAATGCATTCATTATATATTTTTTTTTTAGGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                    ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTGGAATA
                                                                                                                                                                                                                                                                                                                           TTTCCATACATATAATGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                   TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATTICAAGTCAAGTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2517 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA
1618
                                      1678
                                                                             1738
                                                                                                                     1798
                                                                                                                                        363
                                                                                                                                                            1858
                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                           2098
                                                                                                                                                                                                     1918
                                                                                                                                                                                                                       483
                                                                                                                                                                                                                                            1978
                                                                                                                                                                                                                                                                                                                                                                   2158
                                                                                                  303
                                                                                                                                                                                                                                                                                    2038
                                                                                                                                                                                                                                                                                                                                               663
                                                                                                                                                                                                                                                                                                                                                                                                           2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1083
                                                                                                                                                                                                                                                                                                                                                                                      723
                                                                                                                                                                                                                                                                                                                                                                                                                              783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    963
               dd
                                     ò
                                                     d
                                                                      ò
                                                                                           Dp
                                                                                                                    ò
                                                                                                                                   엄
                                                                                                                                                         ò
                                                                                                                                                                             g
                                                                                                                                                                                                 \overset{>}{\circ}
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                           S A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음
```

Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.

(MILL-) MILLENNIUM PREDICTIVE MEDICINE

17-FEB-2000; 2000US-0183319P. 16-MAR-2000; 2000US-01896G2P. 25-MAY-2000; 2000US-0207454F. 09-UTM-2000; 2000US-0211314P. 18-UUL-2000; 2000US-0219007P. 18-JUL-2000; 2000US-0219007P. 13-DEC-2000; 2000US-0255281P.

20-FEB-2001; 2001WO-US005171

WO200160860-A2. 23-AUG-2001

Homo

Monahan JE;

R, Endege WO,

Schlegel

WPI; 2001-662795/76

```
1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (d) assessing the selficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1678 AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTCAATTTTCTAGTCAACAGAGA 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1738 ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAAACTTGTGCTTATATTTTG 1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1558 AATTITICITITICIAIGIACIGGATAITITIGCATAIAAACTIGCAGTAATAGTICAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTITICTITITCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATTAATAGTTTTTGACATTGGCTTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTAATAGTTTTTGACATTGGCTTTTCTGAGAAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243 AAAAAGATGAAATGAAGCCAATATAAATTGTCAATTTTTCAATTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28.4%; Score 1068; DB 5;
98.0%; Pred. No. 1.7e-144;
tive 0; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 5383; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Rest Local Similarity 98.v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           183
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

BP

CDNA; 1128

ABV26653 standard;

(first entry)

16-SEP-2002

ABV26653;

ABV26653 ID ABV2 XX AC ABV2 XX DT 16-5

```
123 AATTTTTCTTTTTCTATGTACTGGATATTTTTGCATATAACTTGCAGTAATAGTTCAAA
1083 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 5313; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                  Monahan JE;
                                                                                                                                                                                                                                                                                       2000US-0183319P.
2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
                                                            1128
                                                                                                                                                                                                                                                                  20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                        2000US-0219007P
                                                                                                                                                                                                                                                                                                                                                  2000US-0255281P
                                                                                                          (first entry)
                                                            ABV26275 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                   Endege WO,
                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 1102; Conserv
                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                       17-FEB-2000;
16-MAR-2000;
                                                                                                                                                                                                                                                                                                               25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                      18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                   Schlegel R,
                                                                                                          16-SEP-2002
                                                                                                                                                                                                                                          23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1558
                                                                                    ABV26275;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                    RESULT
                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   οg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                             1917
                                                                                                                                                                                                                                                                                                                                                                                                                           2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Geregerecacecreracinecaegracicareaegereaegeriarieseariterreaeg 1082
                                                                                    1617
                                                                                                                                                                                1737
                                                                                                                                                                                                                               1797
                                                                                                                                                                                                                                                                             1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC 2277
                                                                                                                                                                                                                                                                                                                                                                            CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA 1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            842
                                                                                                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTTATACAATATTTTAAAA 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         962
                                                                                                                                                                                                                                                                                                     422
                                                                                                                                                                                                                                                                                                                                                     482
                                                                                                                                                                                                                                                                                                                                                                                                                                                 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Triccaracararaardagagagarragraarraggarrcaagrcraarcaraagargcac 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATTICAAGICAGIGCICAAAAGIIIICAGAIGITAAAGCIGGIGAIGCAGIICAIGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rgarcccagtactrreggaagccaagacagctegarcrerreagcccaggagtrreagcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGGTGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cadacticcacaacacacagaccrcgrrrcrrcaaataarraaaaarraaccaggrgr
                                                                                                                                                                                               243 AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTTCAATTTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                              CCCAAGAAGTITITITAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATGCATTCATTATATTTTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCCATACATATAATGAGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAATTTTATGCCTGAAACAGAGTTTGCGCCATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                   AATTAATAGTTTTTGACATTGGCTTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                          AATTAATAGTTTTTGACATTGGCTTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                              TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                              AGTITCTGGTITITAAAAITCAAGCAAAACTGGAAAAATAATCCATCTAATTATGCTITTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                           CAATGCATTCATTATATTTTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGAGATCCTTGGGACCAGAAGTCTTTTGGATTTCAGATTTTATTTTTGGATTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
 CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                     CTACTCAATAAACTGTGTGTAAGACCAGTGACCAGACCCTTTGCTTAGCTTTACTTC
                                                       CTACTICAATAAACTGTGTAAAGACCAGTGACCCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                     AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                     rrrecaacacacrastraarrraaccrereacrastrarcrereceaaggregarere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2517
                                     1498
                                                                                     1558
                                                                                                                                   1618
                                                                                                                                                          183
                                                                                                                                                                                  1678
                                                                                                                                                                                                                               1738
                                                                                                                                                                                                                                                       303
                                                                                                                                                                                                                                                                              1798
                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                      423
                                                                                                                                                                                                                                                                                                                                                                            1918
                                                                                                                                                                                                                                                                                                                                                                                                    483
                                                                                                                                                                                                                                                                                                                                                                                                                            1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1023
                                                             63
                                                                                                                                                                                                                                                                                                                               1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                   543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                              Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원 수 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                     à
                                                          g
                                                                                     à
                                                                                                          원
                                                                                                                                  ò
                                                                                                                                                         셤
                                                                                                                                                                                  ઠે
                                                                                                                                                                                                    d
                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

1617 1497 1557 The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV6213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (i) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker 122 62 Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; ss. Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer. AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA cracaaartraaargcaacarcrecccarccaa-raccrarrrcarcritgaggggraar cracicaaraacigreraagaccagreacagaccarrigcriagcraaccigacarriacirc 1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC Gaps .. Length 1128; Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other; Indels 28.4%; Score 1068; DB 5; larity 98.0%; Pred. No. 1.7e-144; Conservative 0; Mismatches 20; prostate expression marker cDNA 26266 (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.

ω

```
1438 CCAAATTTCAAATGCCAACATCTCCCCAATTACCTATTTCATCTTTGAGGTGTAAT 1497
                                                                                                                                                                                                                                                                                                                                                                                                     Monahan
                                                                                                                                                                                                                                                                                                                           2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
                                                                                                                                         CDNA; 1128
                                                                                                                                                                                                                                                                                                                                                       2000US-0219007P
                                                                                                                                                                                                                                                                                                20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 1102; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    Endege WO,
                                                                                                                                                                             (first
                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-662795/76
                                                                                                                                         ABV20439 standard;
                                                                                                                                                                                                                  Human; prostate
pharmacogenomic
                                                                                                                                                                                                                                                             WO200160860-A2
                                                                                                                                                                                                                                                                                                                           16-MAR-2000;
25-MAY-2000;
09-JUN-2000;
                                                                                                                                                                                                                                                                                                                   17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                       18-JUL-2000;
                                                                                                                                                                             13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                    Schlegel R,
                                                                                                                                                                                                                                                                               23-AUG-2001
  2398
                                      2458
                                                       1023
                                                                          2517
                                                                                            1083
                     963
                                                                                                                                                           ABV20439;
                                                                                                                                                                                                                                            Ношо
                                                                                                                                ABV20439
                                                                                                                                         g
                                                                                      9
  8 8
                               충
                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                 1497
                                                                                                                      1557
                                                                                                                                                                                                                                                                                                                                              1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2157
                                                                7
                                                                                                                                                        AATTITICITITICIAIGIACTGGATATTITIGCATATAAACTIGCAGTAATAGTICAAA 1617
                                                                                                                                                                                                                                AAAAAGATGAAGCATATATATATATTGTCAATTTTTCAATTTTTCTAGTCAACAGAGA 1737
                                                                                                                                                                                                                                                                      1797
                                                                                                                                                                                                                                                                                                                                                                                                                   CAATGCATTCATTATATATTTTTTTGAAGTACGTAACGAGTTGAGTAACGAGTTGAG 2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2397
                                                                                                                                                                                             CCCAAGAAGTITITIAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA 1977
                                                                                                                               CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACACTTTACTTC 122
                                                                                                                                                                                                                                                                              422
                                                                                                                                                                                                                                                                                                                                                               482
                                                                                                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      842
                                                                                                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                962
the aggressiveness or indolence of prostate cancer in a patient also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                 1438 CCAAATITCAAAIGCCAACAICTCCCCAICCAAIIACCIAITICAICTITGAGGIGIAAI
                                                                                                                   CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                   AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                         THIGGAACACACTAGITAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                      CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATTTCAAGTCAGTCCACAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                    ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                        TITGCAACACACTAGTIAATITTAACCIGIGACTAGTIATCTCTACCGAAGGIGGATGTGT
                                                                                                                                                                                                                                                                                                                                            CAATGCATTCATTATATATTTTTTTTTTATAGTTACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTTTTGGATTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTTTTGGATTTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATTICAAGICAGIGCTCAAAAAGITTCAGAIGITAAGCIGGIGAIGCAGITCAIGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                Gaps
                                                                5
                           Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                               20; Indels
                                            Score 1068; DB 5;
Pred. No. 1.7e-144;
0; Mismatches 20;
                                              28.4%;
98.0%;
                                                              Matches 1102; Conservative
                                                      Similarity
assessing
; (I) is a
                                                                                                                    1498
                                                                                                                                                                                                                                                                                                                                                                                                                  1978
                                                                                                                                                        1558
                                                                                                                                                                                             1618
                                                                                                                                                                                                                                1678
                                                                                                                                                                                                                                                  243
                                                                                                                                                                                                                                                                   1738
                                                                                                                                                                                                                                                                                                        1798
                                                                                                                                                                                                                                                                                                                                           1858
                                                                                                                                                                                                                                                                                                                                                                                1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2338
                                                                                                                                      63
                                                                                                                                                                          123
                                                                                                                                                                                                              183
                                                                                                                                                                                                                                                                                     303
                                                                                                                                                                                                                                                                                                                          363
                                                                                                                                                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                                                                                                 483
                                                                                                                                                                                                                                                                                                                                                                                                                                     543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             903
ន្តដូច
                                                                                               셤
                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                   \overset{\circ}{\sigma}
                                                                                                                                 ď
                                                                                                                                                ∂
                                                                                                                                                                      g
                                                                                                                                                                                     장염
                                                                                                                                                                                                                         à g
                                                                                                                                                                                                                                                           $
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                       원
장
명
                                                                                                                                                                                                                                                                                                                                                                                                            95 G G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
1022
                                                                                                                                                                 2516
                                                                                                                                                                                                                                                 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an isolated nucleic acid molecule (1) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV62213) of the specification or its complement. (1) is useful for: (a) assessing whether a patient is affilicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer; cytostatic; carcinogen; pharmacodyanamic marker; marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                          GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATTAAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 28.4%; Score 1068; DB 5; Length 1128; Local Similarity 98.0%; Pred. No. 1.7e-144; es 1102; Conservative 0; Mismatches 20; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                         ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                        ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human prostate expression marker cDNA 20430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 3347; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E.
```

```
셤
                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                    셤
                          à
                                                g
                                                                          ò
                                                                                                  d
                                                                                                                          ò
                                                                                                                                                                             ò
                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC 2277
                                                                                                                                                                                                                                          1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2097
                                                                                                                                                                                                                                                                                                                                            1617
                                                                                                                                                                                                                                                                                                                                                                                            1677
                                                                                                                                                                                                                                                                                                                                                                                                                                             1737
                                                                                                                                                                                                                  2;
                                                                                                                                                                                                                                                                                          CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC 1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA 1977
The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of prostate cancer; (b) monitoring the progression of prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cancer has metastasized in a patient; (h) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      422
                                                                                                                                                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTTATACAATATTTAAA 782
                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrrccaracarararasasasarragraarasasarrcaasrcraarcaraasargcac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATGTTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                          AATTAATAGTTTTTTGACATTGGCTTTTCTGAGAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAGATCAAATGAAGCATATAATTGTCAATTTTTTCAATTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cccaagaagtrititaargarargccagcritccraatriggagacaaaagccritaariga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATGCATTCATTATATATTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATGCATTCATTATATATATTTTTTTTTTATAGTTACAGTATACGAGTTGAGTTGAGTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Argagargetrigggaccagaagretrirggarricagarrrarrirggarringgarra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                           1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                 CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                   CTACTCAATAAACTGTGAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                             AATTTTTCTTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rrrecaacacacragrraarrraaccrereacragrrarcreracceaaggregargrer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                  5
                                                                                                                                                                                         Length 1128;
                                                                                                                                                                  Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                  20; Indels
                                                                                                                                                                                    ; Pred. No. 1.7e-144; 0; Mismatches 20:
                                                                                                                                                                                           Query Match 28.4%;
Best Local Similarity 98.0%;
Matches 1102; Conservative
                                                                                                                                                                                                                                                                                           1498
                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                             1618
                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                              1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2158
                                                                                                                                                                                                                                                                    4
                                                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                                                                                                                                              1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
   ઠે
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                           \delta
                                                                                                                                                                                                                                                                                                                  අ
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठे
```

```
2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h)
                                                                                                                                                   2397
                                                                                                                                                                                                                                                                                                  1022
                                                                                                                                                                                                                                                                                                                                                      2516
                                                                                                                                                                                                                                                                                                                                                                                                    1082
                                                                                                                                                                                               962
     842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
pharmacogenomic marker; gene; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                   1023 GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG
783 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                        843 TATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGGTGCAGTCCAGTCATGCCAG
                                                                                                                                                                                                  rgarccgagractrrgggaagccaagacaggragarcrcrrgagcccaggagrrrgaggc
                                                                                                                                                                                                                                                                                  GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                      CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT
                                                                                                                                                   TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 3412-3413; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression marker cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Œ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0183319P.
2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV20806 standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Endege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1083
                                                      2278
                                                                                                                                                                                                                                                                                                                                                        2458
                                                                                                                                                        2338
                                                                                                                                                                                                                                                        2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schlegel
                                                                                                                                                                                                       903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV20806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV20806
```

9

```
2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2457
                                                                                                                                                                                                       2277
                                                                                                                                                                                                                                                                                                   2337
                                                                                                                                                                                                                                                                                                                                                                                               2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             842
                                                                                                                                                                                                                                                                                                                                               902
                                                                                                                                                       782
                                                                                                                                                                                                                                                                                                                                                                                                                                           962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
         TTTCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                               TATTICAAGICAGGCICAAAAAGITICAGAIGITAAGCIGGIGAIGCAGITCAIGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGACTGCACAACACAGTGAGACCTCGTTTCTTCAAATAATTAAAAAATTAGCCAGGTGT
                                                                                                     TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                             TATITICAAGTCAGTGCTCAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                          TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                           TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                prostate expression marker cDNA 20608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 3379; 11750pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Monahan JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV20617 standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-FEB-2000; 2000US-018319P.
16-MAR-2000; 2000US-0189862P.
25-MAY-2000; 2000US-0274F4P.
09-UUN-2000; 2000US-021314P.
18-JUL-2000; 2000US-0219007P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0255281P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Endege WO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Schlegel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2517
                                                                                                                                                                                                  2218
                                                                                                                                                                                                                                                                                                                                             843
         2098
                                                         663
                                                                                                     2158
                                                                                                                                                  723
                                                                                                                                                                                                                                                 783
                                                                                                                                                                                                                                                                                              2278
                                                                                                                                                                                                                                                                                                                                                                                          2338
                                                                                                                                                                                                                                                                                                                                                                                                                                      903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV20617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MILL-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV20617
XX
AC ABV2
XX
AC ABV2
XX
DDB Huma
XXX
DDB Huma
XXX
CS Homa
XX
CS Homa
CS Homa
XXX
CS Homa
CS 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                                     පු
                                                                                    8
                                                                                                                                        셤
                                                                                                                                                                                               8
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1497
                                                                                                                                                                                                                               The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether patient is affilicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (d) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATTITICITITICTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACTCAATAAACTGTGTAAGACCAGTGACCCTTTGCTAACCTGACATTTACTTC 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62
                                                                                         Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243 AAAAAGAIGAAAIGAAGCAIAIATATIGICAAIIITITCAAIIITICIAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCAAGAAGTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAAGAAGTITTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAATGCATTCATTATATATTTTTTTTTGTATAGTTACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITIGCAACACACTAGITAATITTAACCIGIGACTAGITATCICTACCGAAGGIGGAIGIGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTGGATTTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1068; DB 5;
Pred. No. 1.7e-144;
0; Mismatches 20;
                                                                                                                                                                                        Claim 1; Page 5346-5347; 11750pp; English
    Monahan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 98.0 Matches 1102; Conservative
    Š
  Endege
                                               WPI; 2001-662795/76
ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       363
```

8 6 6 6

8 8 8

8 8 8

8 6 B

6 B 6 B 6

∂

```
2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1082
                                                                                                                                                                                                                                                                                                                                                                                                          2337
                                                                                                         2097
                                                                                                                                                                                  2157
                                                                                                                                                                                                                                                           2217
                                                                                                                                                                                                                                                                                                                                  2277
                                                                                                                                              662
                                                                                                                                                                                                                                                                                                782
                                                                                                                                                                                                                                                                                                                                                                       842
                                                                                                                                                                                                                                                                                                                                                                                                                                            902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     962
 542
                                                                                                                                                                                                                       722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, prostate cancer, cytostatic, carcinogen, pharmacodyanamic marker, pharmacogenomic marker, gene, 88.
483 CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                TATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATCCGAGTACTTTGGGAAGCCAAGACGGGGGTCTTCTTTTAAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cagactigcacaacacagtgagacctcgrtrcrtcaaataartaaaaartagccaggtgr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG
                                    CAATGCATTCATTATATTTTTTGTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                Argagargeringgaggaggreritrgarringarrinarringgarringgarra
                                                                                                                                                                                                                         663 TTTCCATACATATAATGAGAGATTGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                                                                                                                                                                                           TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                  TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                      CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGT
                                                                     543 CAAIGCAIICAITAIAIAITITITIGIAIAGITACAGIAIACGAGITGAGIAICCCITAG
                                                                                                             ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTTGGATTTTGGAATA
                                                                                                                                                                                      TTTCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAAATTCACACTCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTEGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human prostate expression marker cDNA 26449.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-FEB-2000; 2000US-0183319P.
16-MAR-2000; 2000US-0189962P.
25-MAY-2000; 2000US-0207454P.
09-UUN-2000; 2000US-0211314P.
18-ULI-2000; 2000US-0219007P.
13-DEC-2000; 2000US-0255281P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABV26458 standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-AUG-2001
                                                                                                                                                    603
                                                                                                                                                                                                                                                               2158
                                                                                                                                                                                                                                                                                                                                      2218
                                                                                                                                                                                                                                                                                                                                                                           783
                                                                                                                                                                                                                                                                                                                                                                                                             2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                  843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2517
                                                                                                               2038
                                                                                                                                                                                        2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV26458;
                                        1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABV26458
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                    ò
                                                                                                               ò
                                                                                                                                              ద
                                                                                                                                                                                      à
                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAAGAAGTITITITAATGATATGCCAGCTICCTAATTTGGAGACAAAAGCCTTAATTGA 1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                               Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer, stage of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTTTTCTTTTTCTATGTACTGGATATTTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Arcgaaggaticigircaararirgraaaatigaaaaraaactigigciratatitig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rrrdcaacacacragrraarrraaccrgrgacragrrarcrcraccgaaggrgargrgr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGCAACACACTAGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 28.4%; Score 1068; DB 5; Length 1128; Best Local Similarity 98.0%; Pred. No. 1.7e-144; Matches 1102; Conservative 0; Mismatches 20; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                    (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 5285-5286; 11750pp; English
                                                                                                                                                                                          Endege WO, Monahan JE;
                                      16-MAR-2000; 2000US-0189862P.
25-MAY-2000; 2000US-0207454P.
09-UUN-2000; 2000US-021314P.
18-UUL-2000; 2000US-025900TP.
13-DEC-2000; 2000US-0255281P.
                       2000US-0183319P
                                                                                                                                                                                                                             WPI; 2001-662795/76
                                                                                                                                                                                          Schlegel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       423
```

දු ද

8 6 8 6 8 6 8 6 8 6

8 8

Š

```
1917
                                                                                                                                      1977
                                                                                                                                                                                                  2037
                                                                                                                                                                                                                                                              2097
                                                                                                                                                                                                                                                                                                                        2157
                                                                                                                                                                                                                                                                                                                                                                                    2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1082
                                           422
                                                                                                      482
                                                                                                                                                                                                                               602
                                                                                                                                                                                                                                                                                           662
                                                                                                                                                                                                                                                                                                                                                       722
                                                                                                                                                                                                                                                                                                                                                                                                                   782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   marker;
                                                                                                                                                                                                                 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                        TITIGCAACACACTAGTIAATTIAACCIGIGACTAGTIATCTCIACCGAAGGTGGAIGTGT
                                                                                                       CCCAAGAAGTTTTTAATGATATGCCAGCTTCCTAATTTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                               CAATGCATTCATTATATTTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                           TTTCCATACATATATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                   TTAIGITTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                   TATITICAAGTCAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATTTCAAGTCAGTCCAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1023 GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG
            CTACCGAAGGTGGATGTGT
                                                                       TITCCATACATATAATGAGAGTIGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                               TAATTITATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pharmacodyanamic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2517 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             carcinogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human prostate expression marker cDNA 26121.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic;
gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV26130 standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-FEB-2001; 2001WO-US005171.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; prostate cancer;
pharmacogenomic marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-AUG-2001.
                                      363
                                                                       1858
                                                                                                    423
                                                                                                                                   1918
                                                                                                                                                                                               1978
                                                                                                                                                                                                                              543
                                                                                                                                                                                                                                                           2038
                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                       2098
                                                                                                                                                                                                                                                                                                                                                      663
                                                                                                                                                                                                                                                                                                                                                                                   2158
                                                                                                                                                                                                                                                                                                                                                                                                                723
                                                                                                                                                                                                                                                                                                                                                                                                                                               2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2458
                                                                                                                                                                  483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
ABV26130
                              B
                                                           ò
                                                                                          g
                                                                                                                                8
                                                                                                                                                        g
                                                                                                                                                                                   8
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                             B 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention fracter to an isolated indeter actume injecture 1, computating a mucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (f) assessing the prostate cancer cancer in a patient; (f) assessing the prostate call carcinogent operation of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG 1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention relates to an isolated nucleic acid molecule (I) comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; carcinogen; pharmacodyanamic marker; gene; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                           Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAAATTTCAAATGCCAACATCTCCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAGATGAAATGAAGCATATAATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1068; DB 5;
Pred. No. 1.7e-144;
0; Mismatches 20;
                                                                                                                                                                                                                                                                                  (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 3320-3321; 11750pp; English.
                                                                                                                                                                                                                                                                                                                    Monahan
                                                                                                                                                                          2000US-0183319P.
2000US-0189862P.
                                                                                                                                                                                                    25-MAY-2000; 2000US-0207454P.
09-JUN-2000; 2000US-0211314P.
18-JUL-2000; 2000US-0219007P.
13-DEC-2000; 2000US-0255281P.
                                                                                                                                           20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28.4%;
ilarity 98.0%;
Conservative
        Human; prostate cancer;
pharmacogenomic marker;
                                                                                                                                                                                                                                                                                                                  Endege WO,
                                                                                                                                                                                                                                                                                                                                               WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                        17-FEB-2000;
16-MAR-2000;
                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                Schlegel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 1102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          123
```

셤

8 PP 8

ò

g

8 8

ठ व ठ

8 8 ठे ద 8 g à 염 P à 8 g ઠે g 8 6 ò g à g ò 셤 ò g ò 음 ò g g à ઠે a q 셤 ठे ò The invention relates to isolated nucleic acid (ABNB119-ABNB124), actrivation or in patients with allergic hypersensitivity disease, (I) activation or in patients with allergic hypersensitivity disease, (I) that encodes proteins (ABB77559, ABB77575) (II) or a protein fragment of that encodes proteins (ABB775759, ABB77575) (II) or a protein fragment of patients. (I) or (II) is useful for identifying binding patrers. (I) or (II) is useful for identifying binding patrers. (I) or (II) is useful for identifying binding cate (e.g. allergic hypersensitivity, seasonal rhintis, asthma, involves determining the level of expression of (I) or (II). A computer system, comprising a database containing information identifying the systems. Comprising a database containing information identifying the systems of the or identify the relative expression level of (I). (II) is used as a marker to identify the relative expression level of (I). (II) is used as a marker to identify and as an antigen to raise polyclonal or monoclonal antibodies. (II) is useful for identifying agence that modulate expression of the protein or agents such as agents that modulate expression of the protein or agents are useful for modulating biological activity and as an antigen to raise adonists or antagonists are useful for modulating disease conditions such as allergic hypersensitivity. 120 ALGACTACATTTGAAAGAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC 180 240 240 300 300 360 360 420 420 480 480 540 600 099 9 seasonal rhinitis, asthma, urticaria, atopic dermatitis or mastocytosis GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG ATGACTACATTTGAAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG **ACTICIDATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT** AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAAGGTCAGAGACAGAATATGCCCTT CTTAGGACTICTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGGCATGAAACATTCCTTTGTGGCTA TAGCAGACTCTGGCGAAGTTGTTCTCCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAAGGTCAGAGACAGAATATGCCCTT TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA AAGITTAGAAATATTATCTTATTATATATCCTTAGGCAACTCTGATATGTGGCATCTCTG AAGTTTAGAAATATTATCTTATATATATCCTTAGGCAACTCTGATATGTGGCATCTCTG TGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAAAATATTCTATGTGTTTTTGC ö DB 6; Length 3762; Sequence 3762 BP; 1220 A; 672 C; 680 G; 1190 T; 0 U; 0 Other; Indels . 0 100.0%; Score 3762; 100.0%; Pred. No. 0; iive 0; Mismatches Best\_Local Similarity 100. Matches 3762; Conservative 61 61 121 121 181 241 301 Query Match 181 241 301 361 361 421 421 481 481 601 601 g δ 셤 8 8 % a \$ B \$ D Dp 8 g <u>ک</u> ۾  $\delta$ ò g ò

1020 1020 1080 1200 1200 1260 1320 1380 1440 1080 1260 1320 1380 1500 1620 1620 1680 1680 1440 AAGATGAAATGAAGCATATAAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGAATC 1740 840 1741 GAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTGTTT 1800 780 780 900 900 960 720 TTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAAAACTTTCTTAGGACAATAATGTAAAA TGABABTRABATTICTABTCCCCTGACTABCTGABTGGACCCTCTTCTAGGCCABAGAGA GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT CAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT TGAAAATAAATITCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA CCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGAGACACACC TTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACT GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT TCCACAACCCCTTTAATTTTAGCTAAAGCATTCTTTCTACTGACTTCTTAAGTCTTTAGA CAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTATGACCT GTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA GTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA TITAATGATITAAGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAGTAAAACG GTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT GTGACCTGACCTCTAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTTGG GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTTACAGAATTTTGGGTTTTTGG TTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTTCCAAGCCTGCTCACCA TTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCA 1621 TAATAGTTTTTGACATTGGCTTTTCTGAGAAGAGAAATTGAAATGGAAATGAAAA TITICITITICIATGIACTGGAIAITITIGCAIAIAACTIGCAGTAAIAGITCAAAAT TAATAGTTTTTGACATTGGCTTTTCTGAGAAGAGAAATTGAAAAGTGTCACAAAATAAAAA AATITICAAATGCCAACATCTCCCAATTACCTATTTCATCTTTGAGGTGTAATCTA CTCAATAAACTGTGAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT TITICITITICIAIGEAATATITITICAATAAAACITICCAGTAATAGAAAAT 1681 AAGATGAAATGAAGCATATATAATTGTCAATTTTTCAATTTTTCTAGTCAACAGAGAATC 661 721 721 781 841 841 901 961 1021 1021 1081 1081 1141 1141 1201 1201 1261 1321 1381 1381 1441 1441 1561 661 781 106 961 1261 1321 1501 1501 1621 1561

```
November 18, 2004, 12:17:23 ; Search time 1654 Seconds (without alignments) 11939.735 Million cell updates/sec
                                                                                                                                                                                        8269772
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                       4134886 seqs, 2624710521 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                           - nucleic search, using sw model
                                                                                                                                                                                                                                                                    IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N_Geneseq_23Sep04:*
1: geneseqn1980s:*
2: geneseqn1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                Perfect score:
                                                                             OM nucleic
                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                   Run on:
                                                                                                                                                                                            Title:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. geneseqn2003cs:\* geneseqn2003ds:\* geneseqn2004s:\*

genesequ2000s:\* genesequ2001as:\* genesequ2001bs:\* genesequ2002as:\* genesequ2003as:\* genesequ2003as:\*

Database :

		Description				Abv26458 Human pro	Abv20617 Human pro	Human	Abv20439 Human pro		Abv26653 Human pro	Adc30760 Human nov	Abv01270 Human pro		Abv31276 Human pro	Abv31609 Human pro	Abv40245 Human pro	Human 1	Human ]	Abv00935 Human pro	Abv09593 Human pro	Abv00424 Human pro	Abv39737 Human pro
SUMMARIES		QI	ABN81319	ABV20298	ABV26130	ABV26458	ABV20617	ABV20806	ABV20439	ABV26275	ABV26653	ADC30760	ABV01270	ABV10439	ABV31276	ABV31609	ABV40245	ABV40577	ABV10104	ABV00935	ABV09593	ABV00424	ABV39737
		. BB	9	S	ហ	Ŋ	ഗ	Ŋ	Ŋ	Ŋ	Ŋ	10	Ŋ	'n	'n	S	S	Ŋ	Ŋ	Ŋ	Ŋ	ស	Ŋ
	•	Match Length DB	3762	1128	1128	1128	1128	1128	1128	1128	1128	667	433	397	421	437	437	437	404	446	359	400	401
	& Query	Match	100.0	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	13.5	10.5	10.5	10.4	10.4	10.4	10.4	10.4	10.0	9.1	9.1	9.1
		Score	3762	1068	1068	1068	1068	1068	1068	1068	1068	206	394.2	393.8	392.2	392.2	392.2	392.2	391.8	375	342.8	342.2	342.2
	Result	No.	П	7	m	4	ហ	9	7	60	თ	10	11	12	13	14	15	16	17	18	19	20	21

Claim 1; Page 95-97; 119pp; English.

Abv3 0769 Human pro Abv39958 Human pro Abv09816 Human pro Abv3 0990 Human pro Abv23 0991 Human imm Abv23 0991 Human imm Abv23 0991 Human pro Abv23 09915 Human pro Abv23 09915 Human pro Abv29 09916 Human pro Abv24 09916 Human ner Abv24 09916 Human pol	
ABV30769 ABV39958 ABV39958 ABV30916 AAX70219 AAX70219 AAX70219 ABV23833 ABV23833 ABV29715 ABV29715 ABV29715 ABV29715 ABV29715 ABV29715 ABV29711 AAX161012 AAX161012	4 AAL62585 4 AAL62587 4 AAL62587 A AAL03369 4 AAS07380 6 ABS73149 12 ADL08127
401 401 401 401 1082 1982 1982 1982 1982 112278 17239 117239 181239	1743 1743 1746 1746 66685 66686
	~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
######################################	197.4 197.4 197.4 197.4 197.4
0 222222222222222222222222222222222222	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

S	
_	
-	
~	
ŒΪ	
=	
2.	
7.	
76	
0	
н	
. 7	
7	
Α,	

```
Human; mast cell; MC; antiallergic; antinflammatory; antiasthmatic;
vasotropic; dermatological; allergy; hypersensitivity; rhinitis; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel isolated nucleic acids that are differentially expressed in mast cells in patients with allergic hypersensitivity, encoding proteins associated with mast cell regranulation and allergic hypersensitivity.
                                                                                       Human mast cell related gene MC1 SEQ ID NO 1.
                                                                                                                                                                                 Location/Qualifiers
25. .432
/*tag= a
/product= "MC1"
                                                                                                                                                                                                                                                                                                                                                                                             Einstein R;
                     ABN81319 standard; cDNA; 3762 BP.
                                                                                                                                                                                                                                                                                                               08-DEC-2000; 2000US-0251835P.
14-MAR-2001; 2001US-0275479P.
28-MAR-2001; 2001US-0279115P.
02-APR-2001; 2001US-0280143P.
                                                                                                                                                                                                                                                                                          07-DEC-2001; 2001WO-US046180.
                                                                  30-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                             Nocka K, Pirozzi G,
                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-508560/54.
P-PSDB; ABB77569.
                                                                                                                                                                                                                                                                                                                                                                      (UNIO ) UCB SA.
                                                                                                                                                                                                                                             WO200246389-A2
                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                   13-JUN-2002
                                                                                                                                      gene; ss.
                                              ABN81319;
RESULT 1
ABN81319
```

This Page Blank (uspto)

ò

```
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                           q
                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone lib="NCI CGAP Kidl1"
/note="Organ: Kidney; Vector: pT7T3D-Pac (Pharmacia) with
modified polylinker; Site 1: Not 1; Site 2: Eco RI;
Plasmid DNA from the normalized library NCI CGAP Kid3 was
prepared, and se circles were made in vitro. Following HAP
purification, this DNA was used as tracer in a subtractive
hybridization reaction. The driver was PCR-amplified cDNAs
from a pool of 5,000 clones made from the same library
(cloneIDs 1322376-1323911, 1456007-1456775, and
1500552-1502855). Subtraction by Bento Soares and M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.

Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.

Emmert-Buck, M.D., Ph.D.

CDNA Library Preparation: M. Bento Soares, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center

Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.G.B. Consortium/Libri at:

Www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 1086 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                456 bp mRNA linear EST 20-DEC-1999
wh68g04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2385942 3',
MRNA sequence.
AI766257
                                                                                                                                                                                                                                                                         CTATCAGTAGTIGIACATCTTACTIGICICAGCAIAICAC-CATAIAGATAIACTATAAT 3645
                                                                                                                                                                               3527 IGIGIGIAAGGCIICITITAGICAITAIAATAITITIGAGAITCAICIAIGITIAAIGII 3586
                                                                                                                                                                                                                                                                                                                                                               3646 TIGITAATCTAATCACTGATGGATATGTAGGATATTT--AAGTTTTTGACATTATGAATA 3703
                                                                                                                                                                                                                                                                                                                                                                                            593 GTGTTACTCTAATCACTGATGGATATGTAGGCTAATTGACAGTGTTTGACATTATGATAA 652
                                            414
                                                                                                                                                                                                                              475 Grgrgrgraaggcrrcrrragrcarrarara-rgrrgagarrcarcrafgrraafg-r 532
                                                                                                                                                                                                                                                                                                                     533 CTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCACATATAGATTTACGTATAATT 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 456)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.

NATI-ORAP Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
Unpublished (1997)
                                     AAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAAATGATCTGCT
                                                                                                                                        415 regraraariaraacrerreragararrigiageagreracerrrecararrrarrige
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seq primer: -400P from Gibco
High quality sequence stop: 437.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mkNA"
/db_xref="taxon:9606"
/clone="IMAGE:2385942"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AI766257.1 GI:5232766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . .456
                                                                                                                                                                                                                                                                                3587
                                                   355
                                                                                                3467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
AI766257/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                          셤
                                                                                                                                                                                       ò
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                         ð
```

Fatima Bonaldo.

ó

Length 456;

Score 446.6; DB 1; Pred. No. 5.1e-53;

397

TGTTCTATCAGIAGITGTACATCTTACTTGTCTCAGCATATCACCATATAGATATACTAT 3642 AATTTGTTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAAT 3702 3342 3402 3462 3522 3582 337 277 217 TTIGIGIGITATAAGGCTTCTTTAGTCATTATATATTTTTGAGATTCATCTATGTTTAA 157 97 37 3283 TCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTT CCAGAAAGTICCACAGIGCICCITIICCCIGAGITICACCAGICCIGGCAACCAAIGAIC 336 CCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAATGATC 276 TGCTTCGTATAAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTCCATATTATA TITGIGIGIGIAAGGCITCTTTTAGTCATTATAATATTTTTGAGATTCATCTATTAA 156 IGITCTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCACCATATAGATATACTATATA 3343 GICAAAIGIATICACCCAIGIAGICACCICCTIAIGAAGAGACAGAACACGIACAICCIC TGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTCCATATTTAT Gaps ; 0 Indels 3703 AAAGTGGCTATAAATGAAAAAAAAAAAAAAA 3735 AAAGTGGCTATAAATGAATAAAAAAACTACAAA 0; Mismatches Query Match
Best Local Similarity 99.1%;
Matches 449; Conservative 3523 216 3583 3643 3463 3403

Search completed: November 18, 2004, 21:26:32 Job time : 10884 secs

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. 1 (bases 1 to 848)
MNH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
                        BF243193
BF243193.1 GI:11157122
                                                                    Homo sapiens (human)
                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Sim:
Matches 633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                 source
                                                                 SOURCE
                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                        ACCESSION
                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ó;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3222 ATCTTTTATGCATATAAATATTTGAACATTTTACATTGTTTATATTTTAATCAGTTTTA 3281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTT 3341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3401
                                                                                                                                                                                                                                                                                                                      /note="voctor: pECBAC1; Site 1: HindIII; This library was
constructed from MCF7 breast cancer cell line by Amplicon
Express (http://www.genomex.com) using their standard
procedure."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCAGAAAGTICCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAATGAT 3461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTCCATATTTA 3521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITIGIGIGIAAAGGCIICITITAGICAITAIAATAITITIGAGAITCAICIAIGITIA 3581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGITCIAICAGIAGITGIACAICITACITGICICAGCAIAICACCAIAIAGAIAIACIA 3641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3642 TAATTTGTTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAA 3701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cccagadagriccacargerecritirecridagrireaceagrecredecaacearigar 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'clone lib="Human MCF7 breast cancer cell line library (MCF7 \overline{1})"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGAACACGTACATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                0
   Natl. Acad. Sci. U.S.A. 100 (13), 7696-7701 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                Score 499.6; DB 8; Length 757; Pred. No. 1.6e-60; 0; Mismatches 9; Indels 0;
                                                                                                                                               This clone is available from Amplicon Express http://www.genomex.com
Class: BAC ends.
                                          Contact: Volik SV
Colin Collins' lab
UCSF Comprehensive Cancer Center
UCSF Box 0809, San Francisco, CA 94143-0808,
Tel: 415 502 7066
Fax: 415 502 5665
Email: svolik@cc.ucsf.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAAAGTGGCTATAAATGAAAAAAAAAAAAAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1. .757
/organism="Homo sapiens"
                                                                                                                                                                                                                                      /mol_type="genomic_DNA"
/db_xref="taxon:9606"
/clone="MCF7_1-3010"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 13.3%;
Best Local Similarity 98.2%;
Matches 505; Conservative (
               22709111
12788976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                          Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
BF243193
LOCUS
DEFINITION
             MEDLINE
PUBMED
JOURNAL
                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

```
/ Organization | Continue | Conti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAATTTTTGTGAAGCTTATCTTTT 3228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3229 ATGCATATAAATATTTGAACATTTTACATTGTTTATTTTTTAATCAGTTTTACTCAAGT 3288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1289 GTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAAA 3348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGAA-CACGTACATCCTCCCAGA 3407
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: CLONETECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://imaga-llnl.gov
Plate: LLCM984 row: c column: 10
High quality sequence stop: 546.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 CTAGTITITCAGCAAAGCAGGATITAAGAAATGTAACTAICTTAIGIGGTIATGAAGAAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3109 CTAGITITICAGCAAAGCAGGATITAAGAAATGTAACTAICTIATGTGGTTATGAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3049 CATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGAGATGTCTTAATCTTTCCGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGCAGATGTCTTAATCTTTCCGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    237 GIGATTATACAAGAAAATGTAACCACTGTAAGGGTAGAGT--ATAAGAATTTGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         179 AIGCATATAAATATTTGAACATTTTACATGGTT -- ATATTTTAATCAGTTTTACTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          295 IGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGAAGCACGTACATCCTCCCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 848;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13.0%; Score 487.6; DB 2;
llarity 90.4%; Pred. No. 7.6e-59;
Conservative 0; Mismatches 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

BF243193 601877334F1 NIH\_MGC\_55 Homo sapiens cDNA clone IMAGE:4105665 5',

```
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               504 bp mRNA linear EST 06-APR-2000 IMAGE:2979975 3', mRNĀ Bequence.
                                                                                                                                                                                                                                        1000
                                                                                                                                                                                                                                                                                                            1060
                                                                                                                                                                                                                                                                                                                                                                           1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -TITAAGCIGAA--CCGAIGIGCACTIT----CCAITIAAIGAITIAIGICITIGCITGIA 1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             539 AACTITGAATICTACCTAIGACCGTGTAAGGCTCTCTCCTGGTTCAAGATCTTTGCCCTC 598
                                                                                                                                                                                                                                                                          418
                                                                                                                                                                     940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (Dases 1 to 504)

1 (CAB http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index

Unpublished (1997)
TTAGGACAATACTGTACAAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGAC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -40UP from Gibbc
High quality sequence stop: 451.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        599 TITTAAGCIGAAGCCGGAIGIGGACTITICCCAITITAAIGGAITAIGICTIIGGIGGIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1001 ACATAACAGAGACCTTGGTTTCCACACCCCTTTATTTAGCTAAAGCATTCTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                    AACTITIGAA-TCTACCTATGACC-TGTAAGCTCTCCTCCTGCTTCAAGATCTTGCCTC--
                                                                                                                                                                                        299 CCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCC
                                                                                                                                                                                                                                        AACCTGACTCTGGTGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCT
                                                                                                                                                                                                                                                             180 CCTCTTCTAGGCCAAAGAGCCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAG
                                                                                                                                                                      CCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCC
                                                                                                                                                                                                                                                                                                                                                                             TGACTTCTTAAGTCTTTAGACA--AAGCTTAACTCTTTCAACCAATT-GCCAATCAGACA
                                 CCTCTTCTAGGCCAAAGAGACCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAG
                                                                                                      GAAGGGAGGTGAGACACCTTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAGTGA
                                                                                                                     240 GAAGGGAGGTGAGACACACCTTGTTATACCCCTTCCC-TTTGGAGTTTATGCACAAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITICICA - GGACCTCCTGAGAGTGTATCCCAGGC 1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTITCICAAGGAACTCCTGGGAAGTGGATCCCAGGC 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .504
/organism="Homo sapiens"
/mol_type="mRNN"
/db_xref="taxon:9606"
/clone="INAGE:2979975"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AW665849.1 GI:7458398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                 419
                                                                                                                                                                                                                                                                                                                                                                                   1001
                                                                                                                                                                                                                                                                                                                                                                                                                 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         719
                                                                                                                                                                                                                                            941
                                                                                                        821
                                                                                                                                                                          881
                                       761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
AW665849/C
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
```

g

q ö ద ò g ò g ò

d ò 셤 8

ò

g

ò g

```
/clone lib="Soares NFL T GBC S1"
/note="Organ: pooled; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site 1: Not 1: Site 2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (fetal lung NbHL19W, testis NHT, and B-cell NCI CGAP GCB1) were mixed, and ss circles were made in vitro. Pollowing HAP purification, this DNA was used tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-302087, 682632-667239, 726408-728711, and 729096-731339. Subtraction by Bento Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 757)
Vollik,S., Zhao,S., Chin,K., Brebner,J.H., Herndon,D.R., Tao,Q., Kowbel,D., Huang,G., Lapuk,A., Kuo,W.-L., Magrane,G., de Jong,P., Gray,J.W. and Collins,C.
End-sequence profiling: Sequence-based analysis of aberrant genomes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BZ600841 linear GSS 08-JUN-2003 WHAAAU89TR Human MCF7 breast cancer cell line library (MCF7_1) Homo sapiens genomic clone MCF7_1-3010, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                     3278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3458
                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    145
                                                                                                                                                                                                                                                                                                                                                                                                                           445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3579 TIBAIGITCIBICAGIAGITGIACAICTICTIGITCICAGCAIAICACCAIATAGAIAIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATAATTTGTTAATCTAATCACGGATGGGATATGTAGGATATTTAAGGTTTTTGACATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTCCCAGAAAGTTCCACAGAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATCTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTCCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATTTTGTGTGTAAGGCTTCTTTTAGTCATTATAATATTTTTGAGATTCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTATCTTTTATGCATATAAATATTTGAACATTTTTACATTGTTTATATTTTAATCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                         504 CITAICHTHAIGCARARAARATHTHGAACATHTHACATHGHTHTHTHAATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTGTCAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGAACACGTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        324 CCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTACTCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAA
                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                            504;
                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                        13.3%; Score 500.8; DB 2;
.larity 99.6%; Pred. No. 1.3e-60;
Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATAAAGTGGCTATAAATGAAAA 3722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATAAAGTGGCAATAAATGAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BZ600841.1 GI:31509303
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BZ600841
                                                                                                                                                                                                                                                                                                                                     Best Local Simi
Matches 502;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24
                                                                                                                                                                                                                                                                                                                                                                                              3219
                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
BZ600841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                        ORIGIN
```

ω

480

```
/mol type="mrNA"
/db_xref="taxon:9606"
/db_xref="TwAGE:4091963"
/clone="InAGE:4091963"
/tissue_type="from acute myelogenous leukemia"
/lab host="Dayn: Done marrow; Vector: pDNR-LIB (Clontech);
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site=1: Sfil (ggccgcctcggcc); Site=2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
                                                                                                                                                                                                                                                                                                                                                                                                                                                               601875444F2 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4091963 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3' adaptor sequence:
5'-ATTCTAGAGGCGAGGGGCGCACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo
                                                                    Contact: Robert Strausberg, Ph.D.
Email: Gapba-r@mail.nih.gov
Tissue Procurement: Arcc
CDNA Library Preparation: CLONETECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM948 row: h column: 12
High quality sequence stop: 651.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 ATATICTATGIG-TITIGCTIGTAAAGTITGAGGACATGGAGGTGATAAAAAAAAACTTIC 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 809)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     582 CTGATATGTGGCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    642 ATAITCIAIGITITIGCITGIAAAGITIGAGGACAIGGAGGIGAIAAAAAAAACITIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tch 13.3%; Score 502; DB 2; al Similarity 90.5%; Pred. No. 7.4e-61; 684; Conservative 0; Mismatches 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                  481 TAGCAGACTCTGGCGAAGTTGTTCAC 506
                                                                                                                                                                                                                                          BF240893.1 GI:11154817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              608. .1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 684; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BF240893
                                                                                                                                                                                                                                                                   501
                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                 BF240893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DRIGIN
                                                                                         gg
                                                                                                                                                                                                                                                       a
                                                                                                                                                                          à
                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Primates, Catarrhini, Hominidae, Homo.

I (bases I to 527)

S NIH-MGC http://mgc.nci.nih.gov/.

Mational Institutes of Health, Mammalian Gene Collection (MGC)

Contact: Robert Strausberg, Ph.D.

Email: Gapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: CLONETECH Laboratories, Inc.

CDNA Library Preparation: CLONETECH Laboratories, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be http://image.llnl.gov

lttp://image.llnl.gov

Plate: LLCM993 row: a column: 01

High quality sequence stop: 518.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /dlone=ITMAGE.4109064"
/tissue_type="from acute myelogenous leukemia"
/tab.hose="bH108" | Thage-resistant" |
/tab.hose="bH108" | Thage-resistant" |
/tab.hose="bH108" | Thage-resistant" |
/tab.hose="bH108" | Thage-resistant |
/tab.hose="cran: bone marrow; Vector: pDNR-LIB (Clontech);
/tab.hose="cran: bnd marrow; Vector: pdn marrow; Vector: bnd marrow; Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 5'-ATTCTAGAGGCGAGCGGCCGACTG-dT (30) BN-3' (where B = A, C, O T G and N = A, C, G, Or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201 ACTICITATION IN INTERPRESE AGAGA A GOOGLE CONTROLL IN INTERPRESENTATION SERVICE CONTROLL SERVICE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTICTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGAGAAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 527;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 13.5%; Score 506; DB 2; Length 52: Best Local Similarity 100.0%; Pred. No. 2.3e-61; Matches 506; Conservative 0; Mismatches 0; Indels

    .527
    /organism="Homo sapiens"
/mol_type="mRNA"
    /db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Source
ORGANISM
                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DRIGIN
```

qq à qq g

ò

g

ò

g

 $\dot{\delta}$ 

셤

ò

ઠ

13;

641

701

셤 ò

δ

```
organism="Homo sapiens"
                          /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 98.7%;
Matches 538; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3731 AAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF242113
BF242113.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3551
                                                                                                                                                                                                                                                                                                                                                                                         549
                                                                                                                                                                                                                                                                                                                                                                                                                        3251
                                                                                                                                                                                                                                                                                                                                                                                                                                                     489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
BF242113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Robert Strausberg, Ph.D.

Contact: Robert Strausberg, Ph.D.

Email: Gaspbs-r@mail.nih.gov

Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.

Emmert-Buck, M.D., Ph.D.

CDNA Library Preparation: M. Bento Soares, Ph.D.

CDNA Library Preparation: M. Bento Soares, Ph.D.

CDNA Library Arrayed by: Greg lennon, Ph.D.

DAS Sequencing by: Washington University Genome Sequencing Center

Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LIML, send email to:

info@inmage.llnl.gov

Seq primer: -40UP from Gibco

High quality sequence stop: 476.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BF434786 549 bp mRNA linear EST 29-NOV-2000
7072f03.xl NCI_CGAP_Kidl1 Homo sapiens cDNA clone IMAGE:3641981 3',
                                2870
                                                                                                                                                                                                                      3050
                                                                                                                                                                                                                                                                                  3110
                                                                                                                                                                                                                                                                                                                                               3170
                                                                                                                                                                                                                                                                                                                                                                                                           3227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGCATATAAATATTTTGAACATTTTTACATTGTTTATATTTTTAATCAGTTTTTACTCAAG 3287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAA 3347
                                                                                            GGAAAATGACAAAATTTTTTTTTTTCGTCTGCCTTTGTAGCTGTTTTATGATATAATA 2930
                                                                                                                                                        CCTTATITIGIAATAAATTAATTTTAATTTGAGTAACAATCTGGAATTATCAGAGAAGGG 2990
                                                                                                                                                                                                                                                                                                                                                                                                                                          488
                                                                                                                                                                                                                                                                                                                                                                            428
                                                                                                                                                                                       248
                                                                                                                                                                                                                                                    308
                                                GGAAAATGACAAAATTTTTTACTTTTCGTCTGCCTTTGTAGCTATTTTATGATATAAATA 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I (bases I to 59)
NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     489 TATGCATATAAATATTTGAACATTCTACATTGTTTATATTCTTAATCAATTTTACTCAAG
                                                                                                                                                                                                                     GCAAGCAATAGGTTAATAAACAGTATTGATTGGTAGAAGGAACGTTGAAATCCAAGAGCA
                                                                                                                                                                                                                                                                                                            309 TCAGTGTCTGGTGGTTCACCATAAGCCACAGCAGATGTCTTAATCTTTCCGAGATCT
                                                                                                                                                                                                                                                                                                                                                                            369 AGTITITICAGCAAAGTAGAGTITIAAGAAATGTAACTATCTTATGTGGTTATGAAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                           429 TAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAATTGTTTTGTGAAGCTTATCTTT
                                                                                                                                                                            249 GCAAGCAACAGGTTAATAAAAGGGATTATTGAATTGTAGAAGGAACATTGAAATCCAAGAGCA
                                                                                                                                                                                                                                                                                  3051 TCAATGICITCIGGIGGITCACCATAAGCCACAGAGATGICITAATCITTCCGAGAICI
                                                                                                                                                                                                                                                                                                                                               3111 AGTITITCAGCAAAAGCAGGATTTAAGAAATGTAACTATCTTATGTGTGTATGAAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                           TAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAA---TTTTGTGAAGCTTATCTTT
 GGATTCTTGTGCCCTCTTGTGGTGATTTACATGTGCGGAAGGGAAACAATAGAAATTTTG
                                CAATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGATATTAGCCAATTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3348 ATGIATICACCCATGIAGICACCICCIT 3375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BF434786.1 GI:11447074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BF434786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                              3171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  609
                                                                                                                              129
                                   2811
                                                                 69
                                                                                                 2871
                                                                                                                                                            2931
                                                                                                                                                                                                                         2991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BF434786/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                       g
                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                          С
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                             셤
                                                                                                                                                             ò
                                                                                                                                                                                                                         ઠે
```

```
/clone in-makers of the property of the prepared, and se circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 clones made from the same library (clonelDs 132376-1323911, 1456007-1456775, and from the property of the property of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF242113 527 bp mRNA linear EST 14-NOV-2000 601880401F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4109064 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTTATGAAGAGACAGAACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCC 3430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 TGTAGGATATTTAAGTTTTTTGACATTATGAATAAAGTGGCTATAAATGAATAAAGCGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3611 TGTCTCAGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCACTGATGGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTACATTGTTTTATATTTTAATCAGTTTTACTCAAGTGTGTGATTATATACAAGAAAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGAGITICACCAGICCIGGCAACCAAIGAICTGCIICGIAIAAIIAIAACIGIICIAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9491 TATTIGIAGCAATGIACCCTITCCATATITATITITGIGIGIAAGGCTICTITIAGICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATAATATTTTTTGAGATTCATCTATGTTTAATGTTCTATCAGTAGTTGTACATCTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3191 TGCTTTTTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAATATTTGAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rectritraaccretaaattrigigaagcriatcritraigcarataaratrirgaacat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 533.8; DB 2;
Pred. No. 2.9e-65;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GI:11156040
```

```
2314
                                                                                                                                                                      2374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AG182348 643 bp DNA linear GSS 09-JAN-2002
Pan troglodytes DNA, clone: RP43-055101.TJ, genomic survey
sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2810
                                                                                                                                                                                                                                                   TCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAA 2434
                                                                                                                           ccarcagaaagcagaagrercacrarrrcaagrercagagcreaaaagrrrcagargraa 482
                                                                                                                                                                                         GTAATTTTATACAATATTTTAAATTTTTATGCCTGAAACAGAGTTTGCGCCACATTGGA 422
                                                                                                                                                                                                                                                                        Pan troglodytes
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Pan.
        GTAATTTTATACAATATTTTAAATTTTTATGCCTGAAACAGAGTTTGCGCACATTGGA
                                                                                                                                                                    GCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATC
                                                                                     2255 CCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2751 GAATTCTTATGCCCTCTTGTGGTGATTTTAATGTGCGGAAGGGAAACAATAGAAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fujiyama, A., Hattori, M., Toyoda, A., Taylor, T.D., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y.
BAC end sequences of Library RPCI-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /sex="male"
/cell_type="lymphocytes"
/clone_lib="RPCI-43 Chimpanzee Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 15.2%; Score 570.4; DB 9; Best Local Similarity 95.4%; Pred. No. 2.1e-70; Matches 599; Conservative 0; Mismatches 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Pan troglodytes"
/mol_type="genomic DNA"
/db_xref="taxon:9598"
/clone="RP43-055101.TJ"
                                                                                                                                                                                                                                                                                                                                    2435 TAATTAAAAATTAGCCAGGTGTGGTG 2461
                                                                                                                                                                                                                                                                                                                                                                           TATTAANAAATTNAGCAGTGTGTGTG 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pan troglodytes (chimpanzee)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R.Site 1 : BCORI
R.Site 2 : For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AG182348.1 GI:16712028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequencing: IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AG182348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LIBRARY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GSS.
                                                                                                                                                                    2315
      2195
                                            363
                                                                                                                              423
                                                                                                                                                                                                           483
                                                                                                                                                                                                                                                   2375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
AG182348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DRIGIN
                                    g
                                                                                                                 D<sub>p</sub>
                                                                                                                                                                                              g
                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                          à
                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_trype="Rooled"
/lab_host="Invalsors.org"
/lab_host="Pooled"
/lab_host="Pooled"
/clone lib="With MGC 191"
/clone lib="With MGC 191"
/note="Vector: pDNR-LIB; Site_I: SfiI (ggccattatggcc);
Site_2: SfiI (ggcgctcggcc); Library is oligo-dT primed and directionally cloned. PBMC - Peripheral Blood Mononuclear Cells. Wha was pooled from 3/6hour stimulation with PMA and nonomycin. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence:
5'-ATTCTAGAGGCGCGGGCGCCATG-dT(30)BD-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.69 kb (range 0.70-5.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by clontech Laboratories (Palo Alto, CA). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1835 ATCTCTACCGAAGGIGGAIGIGIAGITICIGGITITIAAAAITCCAAGGAAAACA 1894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1895 AICCAICTAATTAIGCITICTTICCCAAGAAGITITITAAIGAIAIGCCAGCITCCIAAI 1954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATACGAGTIGAGTAICCCTIAGAIGAGAIGCTIGGGACCAGAAGIGITITGGAITITCAG 2074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2075 ATTTATTTTGGATTTTGGAATATTTCCATACATATAATGAGAGTTGGAAAATGGGAT 2134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2135 TCAAGTCTAATCATAAAATTCACTTATGTTTGATATACACCTTATCTGAATAGCCTGAAG 2194
                                                                                                                                Contact: Daniels S. Gerhard, Ph.D.
Contact: Daniels S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rml0A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information and thep://image.llnl.gov
http://image.llnl.gov
Plate: NDCM210 row: n column: 16
High quality sequence stops: 604.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          183 TATACGAGTTGAGTATCCCTTAGATGAGAGGTTGGGACCAGAAGTGTTTGGGTTTTCAG 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTIATITITIGGATTITIGGAATATTICCATACATATAATGAGAGAGAGAAAAATGGGAT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 728)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTCTACCGAAGGTGGATGTGTATTCTGGTTTTTAAAATTCAAGCAAACTGGAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 6; Length 728;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 612.2; DB 6
Pred. No. 2.8e-76;
0; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone="IMAGE:30414375"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 98.4%;
Matches 617; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bource
ORGANISM
                                                                                              TITLE
JOURNAL
COMMENT
                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RIGIN
```

ij

셤

g ò

ò

g

ò

ò g

```
CD639433
CD639433.1 GI:31806240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens (human)
                                                                                                                                                                        Similarity 97.7
18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTT 3270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST.
Homo
                                                                                                                                                                                          Matches 648;
                                                                                                                                                                                                                                                                                                                                                                                                                                           2789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3268
                                                                                                                                                        Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
CD639433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

CE 1 (bases 1 to 78 and 1 to 100 contacts of Health, Mammalian Gene Collection (MGC)

AL Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLCN2352 row: h column: 03

High quality sequence stop: 399.

Location/Qualifiers

lource /organism="Homo sapiens"

/mol type="mRNA"

/mol type="mRNA"

/db Zref="HAMGE:610338"

/**con: TYME="MRNA"

/db Zref="MAMGE:610338"

/**con: TYME="MAMGE:610338"

/**con: TYME="MAMGE:610338"

/**con: TYME="MAMGE:610338"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BU155429 786 bp mRNA linear EST 03-SEP-2002 AGENCOURT 7979368 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:6108338 5', mRNA sequence.
BU155429 GI:22668961
                                                                                                                                                                                                                                                              1180
                                                                                                                        941 AACCIGACICIGGIGIAGAICACACACIGICIGAGGGAITCCAICIAIGAGACITIGICI 1000
                                                                                                                                                                                            GAACC---GATGTGCACTTTCCATTTAATGATTTAT-GTCTTTGCTTGTAA--CTCCTGT 1234
                                                                                                                                                                                                                                                                                                                                                                     662
                                                                       363 CCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCC 422
                                                                                                                                                         482
                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                                                                                                                                                                           663 GAACCCGATGTGCCCTTTTCCCATTTAATGATTTATGGCCTTTGCTTGTAAACTCCTGGC 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="from acute myelogenous leukemia"
/lab_host="DH10B (T1 phage-resistant)"
/clone lib="NIH MGC 55"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site 1: Sfil (gacgactcggcc); Site 2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from
                                                                                                                                                                                                                                                                                                                                                              603 TITGAALCTACCTAIGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCT
                                                                                                                                                                                                               TITGAAICTACCIAIGACCIGIAAGCICICCICCIGCIICAAGAICTIGCCICITIAAGCI
303 GAAGGGAGGTGAGACACACATGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGA
                                                                                                                                              1235 CTCCCTAAATGTATAAA 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  723 recerranarierarana 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                              1001
                                                                                                                                                                                                                                                                    1061
                                                                                                                                                                                                                                                                                                     543
                                                                                                                                                                                                                                                                                                                                                                                                           1181
                                                                                                                                                                                                                                                                                                                                      1121
                                                      881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
BU155429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
```

a

d

à

d ò d ò

 $\delta$ 

qq ò 임 ò 셤

ð

```
3028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CD639433 728 bp mRNA linear EST 17-JUN-2003 AGENCOURT 14532881 NIH MGC 191 Homo sapiens cDNA clone IMAGE:30414375 5', mRNA sequence.
cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 5'-ATTCTACAGGCGCCAGGCGCGCAGGCGT (30) BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2848
                                                                                                                                                                                                                                                                                                                                   2668
                                                                                                                                                                                                                                                                                                                                                                                                                       2728
                                                                                                                                                                                                                                                                                        H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        602
                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                302
                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123 ACATTITIGCCTCTCTATTCAACGAATTCTTATGCCCTCTTGTGGTGATTTTAATGTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGGGAAACAATAGAAATTTTTGCAATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  183 AAGGGAAGCAATAGAAATTTTGCAATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                243 CTGTAGATATTAGCCAATTTTAGGAAAAGACAAAATTTTTTACTTTTGTCGCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGCTGTTTTATGATATAAATACCTTATTTGTAATAAAATTAAATTTTAATTTGAGTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3029 GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483 IGTCTTAATCTTTCCGAGATCTAGTTTTTTCAGCCAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITATGIGGITATGAAGAACAATAGAATCATIGCIGTATAAGIGCTITT-TAACCTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTATIGTGGCTATGAAGAACAATAGAATCCTTGCTGGATAAGTGCTTTTCTACCCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                   2669 ITTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCATTTGCTGTATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                2729 ACAITITGCCTCTGTATTCAAGGAATTCTTATGCCTCTTGTGGTGATTTTAATGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTAGATATTAGCCAATTTAGGAAAATGACAAAATTTTTTACTTTTCGTCTGCCTTTG
                                                                                                                                                                                                                                                                                                                                   2609 GITICAGAITITIGGAGCAITITCAGAICITCAGAITIAGGGAITITICAACCIGTACIGACCI
                                                                                                                                                                                                                                                                                                                                                                 3 GTTTCAGATTTTGGAGCATTTCAGATCTTCAGATTTAGGGGATTTTCAACCTGTACTGACCT
                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                             Length 786;
                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                          16.7%; Score 628.6; DB 5; 97.7%; Pred. No. 1.4e-78; tive 0; Mismatches 14;
```

```
/woltype="mcMuo" saplens"
/woltype="mcMuo" saplens"
/db_xref="taxon:9606"
/clone="McMacs:6107719"
/lab_host="flow acute myelogenous leukemia"
/lab_host="bH108" (Tl phage=resistant)"
/clone_lib="NHH MGC 55"
/clone_lib="NHH MGC 55"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site_l: Sfil (ggocgctcggcc); Site_2: Sfil
(ggocattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CAGGCCATATGGCC-3' and 3' adaptor sequence: 5'-ATTCTAGAGGCCGACGGCGCACATG-1(30) BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo, Alto, CA)."
                                                           bp mRNA linear EST 03-SEP-2002
Homo sapiens cDNA clone IMAGE:6107719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 TCTGATATGTGGCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTCTTCTAGGCCAAAGAGACCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAG 820
                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                   Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Preparation: CLONTECH Laboratorium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2350 row: n column: 08
High quality sequence stop: 512.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       521 GAAACATTCCTTTCTGGCTAAAGTTTAGAAATATTATCTTATTATATATCCTTAGGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 dadacarrectricingerrangerringanararrarrarrarrarrarrectringecane
                                                                                                                                                                                                                                                                     1 (bases 1 to 741)
NIH-MC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               581 TCTGATATGTGGCCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTAGGACAATAATGTAAAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 741;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17.9%; Score 673; DB 5; Length 74 larity 97.2%; Pred. No. 8.4e-85; Conservative 0; Mismatches 15; Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .741
/organism="Homo sapiens"
                                                       AGENCOURT 7951175 NIH_MGC_55 1
5', mRNA sequence.
                                                                                                                                         BU155309.1 GI:22668841
                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 718; Conserval
                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243
                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                             DEFINITION
                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                     ACCESSION
               RESULT 5
BU155309
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
/lab_host="DH10B (T1 phage-resistant)"
/clone lih="NIH MGC 55"
/note="Organ: bone marrow, Vector: pDNR-LIB (Clontech);
Site 1: Sili (ggocgctcggcc); Site 2: Sfil
(ggocattatggcc); Double-stranded cDNA was prepared from
cell line RNA. 5' and 3' adaptors were used in cloning as
follows: 5' adaptor sequence: 5'-CACGCCATTATGGCC-3' and
3' adaptor sequence: 6'-CACGCCATTATGGCC-3' and
5'-ATTATACAGCGCCGACCAGCAGTG-dT(3)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size
1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained
inserts by PCR. This library was enriched for full-length
clones and was constructed by Clontech Laboratories (Palo,
Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                            2115 AGAGAGTIGGAAAAIGGGAITCAAGICIAAICAIAAAAITCACIIAIGITIGAIAIACAC 2174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAATTTTTATGCCTGAAA 2234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2235 CAGAGITTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAGTGCT 2294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2295 CAAAAAGTITCAGAIGTIAAAGCIGGIGAIGCAGTICAIGCCAGIGAICCGAGIACTITGG 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACTGAGCCAGGATCTTGCCACACTTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTC 2594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 AGAGAGITGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTATGTTTGATATACAC 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123 CTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAATTTTTAGCCTGAAA 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           662
                                                                                                                                                                                                                                                                                                                                                                                                                                                         722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGTGGTGCACACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCCCAGGTACTCAGGAGGCTGAGGTAGTAGTTGTTTGAGACTGGGAGGTTGAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2595 AAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTTCAGATCTTCAGATTAGGGATTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCTGTACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATTIGCTGTATACACA-TITIGCCTCTCTATICAACGAATICIT--AIGCCCTCTIGIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          663 CATITGCTGTATACACATTTTTGCCTCTCTATTCAACGAATTCNTTATGCCCTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                             . 9
                                                                                                                                                                                                                                                                                                                                                 DB 5; Length 785;
                                                                                                                                                                                                                                                                                                                                            18.4%; Score 692.4; DB 5; Length Jarity 97.0%; Pred. No. 1.6e-87; Conservative 0; Mismatches 17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGATTITAA----TGTGCGGAAGGGAAACAATAGAAATTTT 2809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              723 GTGATTTTTATTGTGGCGGAAAGGGAAACCATAAGAAATTT 763
                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                    738;
                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2475
                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                ORIGIN
```

þe

g ò g à qq à g ò g 8 6 ò qq 640

62

Gaps

g  $\delta$ 

8 8

ò g 임 à g ò

à

182

760 242

a

ò

g

ò

g

ò

```
BUJ71872 7952397 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:6108004 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1403 ATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCAAATTTCAAATGCCAACATCTCC 1462
                                                                                                                        TAAAGCATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACCA 1102
                                                                                                                                                                                                        ATTGCCAATCAGACAAACTTTGAATCTACCTATGACCTGTAAGCTCTCCTGCTTCAAG 1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Homo sapiens
Homo sapiens
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
I (bases 1 to 785)
IIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
126 AATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGATCACACACTGTCTGAGGGATTCC 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1283 ACTITCTCAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAAGTCATGTTGGCTCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    486 ACTITCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAIGGTAAGTCATGTIGGTIGGCTCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1343 TCAACCTCTTTAAATATTTTACAGAATTTTGGTTTTTGGTTACCAATAAGTCTCCAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              546 TCAACCTITITAAAIAITITACAGAATTIGGGTTTTGGGTTACCAATAAGTCTTCACAAAT
                                                                                                                                                246 TAAAGCATTCTTTCTACTGACTTCTTAAGTCTTTAGACAAGCTTAACTCTTTCAACCA
                                                                                                                                                                                                                                                                                                                                                                                                  426 TGTAACTCCTGTCTCCCCTAAAAGTAAAAGTAAAAGTGAACCTGACCACCCCCAGGCAC
                                                                                                                                                                                                                                                                                          ATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAATGATTTATGTCTTTGCT
                                                                                                                                                                                                                                                                                                                                                                            TGTAACTCCTGTCTCCCTAAAATGTAAAAGTAAACGGTGACCTGACCACCTCAGGCAC
                                           306 AITGCCAATCAGACAAACTITGAATCTACCTATGACCTGTAAGCTCTCTCCTGCTTCAAG
                                                                                                                                                                                                                                                                                                                  366 AICTIGCCICITIAAGCIGAACGAIGIGCACITICCALITAAIGAITIAIGLITIGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM351 row; j column: 05
High quality sequence stop: 550.
Location/Qualifiers
I.7785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6108004"
/tissue_type="from acute myelogenous leukemia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATCCAATTACCTATTCATCTTTGAGGTGTAATCTAC 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BU171872.1 GI:22685856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5', mKNA
BU171872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               999
                                                                                                                                                                                                                                                                                                                                                                                     1223
                                                   983
                                                                                                                                   1043
                                                                                                                                                                                                                   1103
                                                                                                                                                                                                                                                                                                   1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BU171872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                               δ
                                                                                      g
                                                                                                                                 à
                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
It (bases 1 to 704)
Is Zhao,S., Adams,M.D., Nierman,W., Malek,J., Shizuya,H., Simon,M. and Venter,J.C.
Use of BAC End Sequences from CalTech Libraries for Sequence-Ready
Map Building
L. Unpublished (1997)
L. Other GSSs: CITB1-E1-2548B21.TR
Contact: Shaying Zhao, William Nierman, Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850
Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                            אמת 704 bp DNA linear GSS 06-MAR-1999
CITBI-E1-2548B21.TF CITBI-E1 Homo sapiens genomic clone 2548B21,
genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66 GAGITIAIGCACAAGIGACCAGGAIGAGICAIAAGACIGAIGAAAIAGACIGAIIGIGGC 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGATCACACACTGTCTGAGGGATTCC 982
                                                                                                                                       Email: hboetigg.org
Clones are available from Research Genetics (info@resgen.com). BAC
end search page:
http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html.
Seq primer: Mist.org/tdb/humgen/bac_end_search/bac_end_search.html.
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 862
                                                     TATAGATATACTATAATTTGTTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTT 3688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                              722
          543 ICAICIAIGITIAAIGITICIAICAGIAGIIGIACAICITACTIGICICAGGAIAICACCA 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /cell_type="sperm"
/clone_lib="cirBl=Bl"
/ncte="Vector: pBeloBACI1; Site_1: EcoRI; Site_2: EcoRI;
CalTech Human BAC Library D"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           863 GAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   803 GAATTCTGGCCATGATAGGAAGGGAGGTGAGACACACCTTGTTATACCCCTTTCTG
                                                                                                                                                                        663 TTGACCTTATGAATAAAGTGGCTATAAATGAATAAAGCGACTACCAAATTTGAAAAGACA
                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 704;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18.5%; Score 694.2; DB 8; 99.6%; Pred. No. 9.1e-88; ive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .704
/organism="Homo sapiens"
/organism="Homo sapiens"
/ol_type="genomic DNA"
/db xref="texon:9606"
/clone="2548B21"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                      AQ390121
AQ390121.1 GI:4361144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /вех="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              696; Conservative
                                                                                                                                                                                                                            3749 AAAAAAAAAA 3759
                                                                                                                                                                                                                                                                  723 AGCGGGGAAAA 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S:
Matches 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     923
                                                                                                                                            3689
                                                            3629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                   RESULT 3
                                                                                                                                                                                                                                                                                                                                                    AQ390121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
```

1402

605

þe

임 à 셤

ò

1222

425

365

305

245

1282

485

N

ò g ò ద  $\delta$ рp ò g 8 & 8 &

à qq

Ω ò

ò Ωp ò 원

q ò

ò

```
/organism="Homo sapiens"
/mol_type="mRNA"
/db_tref="taxon:9606"
/dlone="tMagn:6101415"
/lab_host="MDH:6111 phage-resistant)"
/lab_host="bH108 (T1 phage-resistant)"
/lab_host="bH108 (T1 phage-resistant)"
/lone="lorgan: tFstis; Vector: pDNR-LIB (Clontech); Site 1:
/note="lorgan: tFstis; Vector: pDNR-LIB (Clontech); Site 1:
Sfi1 (ggccgcctcggcc); Site 2: Sfi1 (ggccattatggcc); S' and
3' adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGACATGATGAT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size
1.35 kb (range 0.9-4.0 kb). 14/15 colonies contained
inserts by PCR. This library was enriched for full-length
clones and was constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIAATCAGTTTTACTCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGA 3328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGA 3388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCAACCAATGATCTGCTTCGTATAATAACTGTTCTAGATATTTGTAGCAATGTACC 3508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3509 CTITCCATATITATITIGIGIGIAAGGCIICTITIAGICATIAIAAIAITITIGAGAT 3568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3569 TCATCIATGITTAAIGITCTAICAGIAGITGIACAICTIACIIGICICAGCAIAICACA 3628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tisaue Procurement: CLONTECH
CDNA Library Preparation: CLONTECH
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Preparation: CLONTECH Laboratorium (LINL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.llni.gov
Plate: LLCM2334 row: h column: 12
High quality sequence stop: 561.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3029 GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                       þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTATGTGGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITIGIGAAGCITATCITITATGCATATAATATITIGAACATITITACATIGITATATIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTGTGAAGCTTATCTTTTATGCATATAAATATTTGAACATTTTACATTGTTTATATATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243 ITAATCAGITTTACTCAAGIGIGATIATATACAAGAAAAIGTAACCACTGTAAGGGIAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3389 ACACGIACAICCICCCAGAAAGIICCAACAGIGCICCIIIIICCCIGAGIIIICACCAGICCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        303 GITATAAGAATITIGICAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363 ACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTCCCTGAGTTTCACCACTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTITCCATATTIATTITGGGGGGGGGCTTCTTTAGTCATTATAATATTTTGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 695.8; DB 9
Pred. No. 5.3e-88;
0; Mismatches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18.5%;
ilarity 97.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 709; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3329 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                       FEATURES
          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGENCOURT 7838612 NIH MGC_82 bp mRNA linear EST 24-MAY-2002 5', mRNA sequence. BO441475 EQ441475. GI:21180551 EST.
                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                            TIAATCAGITITACTCAAGTGTGATTATACAAGAAAATGTAACCACTGTAAGGGTAGA 3328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGA 3388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCT 3448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCAACCAATGATCTGCTTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACC 3508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTTCCATATTTATTTTGTGTGTGTAAGGCTTCTTTAGTCATTATAAAAATATTTTGAGAT 3568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATAGATATACTATAATTTGTTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTT 3688
                                                                                                                                                                                                                                                                                                                                                                            242
                                                                                                                                                                                      303 GTIATAAGAATTITGTCAAATGTATTCACCCATGTAGTCACCCTTCTTATGAAGAGACAGA 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 782)
MNH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                               3029 GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGCAGA
                                                                                                                                                              TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                                                                                                 TTTTGTGAAGCTTATCTTTTATGCATATAAATATTTGAACATTTTACATTGTTTATATTT
                                                                                                                     GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGAGA
                                                                                                                                                                                                                                           CTTATGTGGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAA
                                                                                                                                                                                                                                                                                                                             TITIGIGAAGCITATCTITIAIGCATATAATATTIGAACATTITACATTGTTATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCAACCAATGATCTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCATCTATGTTTAATGTTCTATCAGTAGTTGTACATCTTAGTTGTCTCAGCATATCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATAGATATACTATAATTTGTTAATCTAATCACTGATGGATATGTANGATATTTAAGTTT
                                               Сарв
                                               0
        Length 749;
                                             Indels
  Score 696.8; DB 5;
Pred. No. 3.9e-88;
0; Mismatches 27;
Query Match
Best Local Similarity 96.3%;
Matches 704; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3749 AAAAAAAAAA 3759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 723 NNNNNNANNANA 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                3089
                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                3149
                                                                                                                                                                                                                                                                                                                             3209
                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                              3269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
BQ441475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
```

3148

62

122

ö

3208

3268

242

302

3448

422

542

```
BUB52381 AGENCOURT
BQ441475 AGENCOURT
AQ190121 CITE1-E1-
BU1155309 AGENCOURT
BU155429 AGENCOURT
CD639433 AGENCOURT
AG182348 Pan trog1
BF424186 7072 603.x
BF742113 601880401
BF241033 01875444
AW65849 hi94f08.x
BF24113 601875444
AW65849 hi94f08.x
BF24113 601873447
AG65849 hi94f08.x
BF24113 6018747334
AT766257 wh68904.x
BG461807 RST44735
AQ47145 H9 5384
BF9655 CIT-HSP-2
AQ74145 H9 5384
BF9655 CIT-HSP-3
BF9655 CIT-HSP-3
BB9655 CIT-HSP-3
BB1885 RPCT11-17P6
                                                                                                                                      November 18, 2004, 13:34:28; Search time 10878 Seconds (without alignments) 12602.158 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                                                                                                                                                            65645750
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                            32822875 seqs, 18219865908 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                               - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AQ109243
BB1885
CD704731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BUI 71872
BUI 5509
BUI 5509
BUI 5509
BUI 5509
BUI 5509
BR 2424
BR 24706
BR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BQ441475
AQ390121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AQ743145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BU852381
                                                                                                                                                                                                                                                                                                                                IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gb_est1::*
gb_htc::*
gb_htc::*
gb_est4::*
gb_est4::*
gb_est6::*
gb_gss1::*
gb_gss1::*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            439
437
475
611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       232.4
226
221.8
198
196.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           506
502
502
500.8
489.6
446.6
410.8
328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     696.8
694.2
692.4
673
673
673
673
673
570.4
533.8
                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                  OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database :
                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             223
223
233
244
253
253
253
                                                                                                                                               Run on:
```

BM983330 UI-CF-DUI	AQ591876 HS_5436_A	CR546941 DKFZp470G	B1857056 603383626	BU182600 AGENCOURT	BG680170 602626836		BE779049 601464810	AA618471 nn27h08.s	AQ827545 HS_5304_A	BM467056 AGENCOURT	T74524 yc83c08.rl	BE393507 601311094	B86762 RPCI11-24P1	AQ740505 HS 5504_A	BUS96567 AGENCOURT	BM989036 UI-H-DF0-	BX480744 DKFZp686P	BG942531 ax26d03.x	CK902534 im66g10.x	TO COLOTTO
BM983330	AQ591876	CR546941	B1857056	BU182600	BG680170	AG084541	BE779049	AA618471	A0827545	BM467056	T74524	BE393507	B86762	A0740505	BU596567	BM989036	BX480744	BG942531	CK902534	0000
Ŋ	œ	7	4	'n	4	σ	~	-	00	4	7	7	œ	00	S	ı,	ı,	4	7	
472	563	506	703	902	977	685	500	275	522	1114	452	592	604	789	603	605	685	349	563	
5.2	5.2				2	2.5	2.5	 		5.1		1.5							ָר ק	
195.6	195	194 6	194.6	194 4	194.4	194.2	193.8	192.4	192.4	192.2	191.6	191.6	191.6	191.6	191.2	19.	101	4 00 1	9.001	
	92	2 1	, c	000	2 6		1 6	, ,	4		9 6	37	α,	0 0	4	4.1	4.5	7 7	4 4	4 1
25																				

## ALIGNMENTS

BU852381 AGENCOURT 10402421 N 5', mRNA Bequence. BU852381.1 GI:24037 EST. Homo sapiens (human) Homo sapiens Eukaryota; Metazoa;	Manmalla; Butderlay Filmates; Cataining, Nowmental, Defection (MGC) NHH-MGC http://mgc.nci.nih.gov/. NHH-MGC http://mgc.nci.nih.gov/. NHH-MGC http://mgc.nci.nih.gov/. NHH-MGC http://mgc.nci.nih.gov/. NHH-MGC http://mgc.nci.nih.gov/. NHH-MGC http://mgc.nci.nih.gov/. Unpublished (1999) Contact: Robert Strausberg, Ph.D. Email: cgapba-r@mail.nih.gov Tissue Procurement: CLONTECH Laboratories, Inc. CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov Plate: LLCM2863 row: p column: 18		Alto, CA)."
RESULT 1 BUBS2381 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	REFERENCE AUTHORS TITLE JOURNAL COMMENT	PEATURES SOUICE	

ORIGIN

a Page Blank (uspto)

```
Search completed: November 18, 2004, 21:31:25 Job time: 291 secs
                                                                                           2556
                                                 Ωp
                                                                                           à
                                                                                                                            g
                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2495
                                                                                 2376 CTTGAGCCCAGGAGTTTGAGGCCAGACTGCACACACACAGTGAGACCTCGTTTCTACAAAT 2435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1736 CTTGAGGTCAGGAGTTGGAGACCAGCCTGGCCAACATAGTGAAACCCCGTCTCTACTAAA 1795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2316 CTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2436 AATTAAAAATTAGCCAGGTGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCT
                                                       2534 GAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGACCCTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                     Sequence 1, Application US/08429742
; Sequence 1, Application US/08429742
; Patent No. 5686257
; GENERAL INFORMATION:
APPLICANT: Razan, J. Fernando
APPLICANT: Bazan, J. Fernando
APPLICANT: Albert
TITLE OF INVENTION: PURIFIED MAMMALIAN T CELL ANTIGENS AND
TITLE OF INVENTION: RELATED REAGENTS
NUMBER OF SEQUENCES:
ADDRESSEE: DNAX Research Institute
GTREST: 901 California Avenue
CITY: Palo Alto
STATE: California
COUNTY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
4.9%; Score 183.8; DB 1; Length 2477;
Best Local Similarity 77.0%; Pred. No. 5.4e-28;
Matches 224; Conservative 0; Mismatches 67; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/429,742
FILING DATE: 26-APR-1995
CILASSTECATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P.
REGISTRATION NUMBER: 34,090
REFERRENCE/DOCKET NUMBER: DX0505
TELEFRAX: 415-652-9196
TELEFRAX: 415-652-9196
                                                                                                                                                            CAAAAAAAAAAAAGTITCAGAITTTGGAGCATTT 2629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 415-496-1200
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2477 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
38..1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , NAME/KEY:
; LOCATION:
US-08-429-742-1
                                                                                                                                                                                                                                       RESULT 15
US-08-429-742-1
                                                                                                                                          2594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                   d
                                                                                                                                          ò
                                                                                                                                                                              d
                                                                   8
```

```
1856 cadegredadarcecricaaccreseaegresacariecaereaegreaegreseea 1915
2496 GAGGTAGTAGGATTGTTTGAGACTGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCA
```

```
29851 Grigaakiciccarcritacraaaatacaaaarracccaggcargcrigargccrigr 29910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29731 TakakakakakakakaracGTGGGGTGCRGGCTCACGCCTGTAGTCCCAGCATTTTG 29790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2354 GGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACA 2413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2474 AGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGACACTGGGAGGTTGAGGCT 2533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2294 TCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2414 GTGAGACCTCGTTTCTACAAATAAATTAAAAATTAGCCAGGTGGTGGTGCTACCTGT
                                                                                                                                                                                                                                                      APPLICANT: Lauer, Parent N.
APPLICANT: Ruddy, David A.
APPLICANT: Ruddy, David A.
APPLICANT: Thomas, Winston
APPLICANT: Thomas, Winston
APPLICANT: Truchihashi, Zenta
APPLICANT: Truchihashi, Zenta
APPLICANT: Wolff, Roger K.
TITLE OF INVENTION: Megabase Transcript Map: No. 5872237e1
TITLE OF INVENTION: Sequences and Antibodies Thereto
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSES: TOWNSEND and TOWNSEND and CREW LLP
STREET: Two Embarcadero Center, 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 246240;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95; Indels
                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/724,394A FILING DATE: U-OCT-1996 CLASSIFICATION: 536 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 4.9%; Score 184; DB 2; Best Local Similarity 71.7%; Pred. No. 1.6e-27; Matches 241; Conservative 0; Mismatches 95
      2594 CAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY: misc_feature
; LOCATION: 1..246240
; OTHER INFORMATION: /note= "HLA-H.CONTIG"
US-08-724-394A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Fitts, Renee A.
REGISTRATION UNBER: 35,136
REFERENCE/DOCKET NUMBER: 017957-000100
TELECOMUNICATION:
TELEPHONE: 415-576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 9411-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                       Sequence 22, Application US/08724394A, Patent No. 5872237, GENERAL INFORMATION:
                                                                                                                                                                                                                        APPLICANT: Feder, John N. APPLICANT: Kronmal, Gregory S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 415-576-0300
INFORMATION FOR SEQ ID NO: 22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FURMALLON TON THE SEQUENCE CHARACTERISTICS:
LENGTH: 246240 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                  US-08-724-394A-22
                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                     셤
      ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            င်
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29731 TAAAAAAAAAAAAACTACGTGGGTGCAGTGGCTCACGCCTGTAGTCCCAGCATTTTG 29790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29911 AATCCCAGCTACTCGGGAGGCTGAGGTCAGGAGAATCACTTGAACCCAGGAGGCAGAGGTT 29970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2294 TCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTG 2353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2534 GAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGACCCTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2474 AGICCCAGGIACICAGGAGGCIGAGGIAGIAGGAITGITIGAGACIGGGAGGIIGAGGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2414 GTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGTGTGCACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 184; DB 2; Length 246240;
Pred. No. 1.6e-27;
0; Mismatches 95; Indels 0;
                                                                                                                                                                                                            TITLE OF INVENTION: Megabase Transcript Map: No. 5872237el
TITLE OF INVENTION: Sequences and Antibodies Thereto
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
STREET: Two Embarcadero Center, 8th Floor
CITT: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk Compatible COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/724,394A FILING DATE: U-OCT-1996
CLASSIFICATION: 5.36
ATTORNEY/AGENT INFORMATION:
NAME: Fitts, Renee A.
REGISTRATION NUMBER: 35,136
REGISTRATION NUMBER: 35,136
REGISTRATION INFORMATION:
TELECHONE: 415-576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature

LOCATION: 1..246240

GTHER INFORMATION: /note= "HLA-H.CONTIG"

US-08-724-394A-21
21, Application US/08724394A
                                                                            Kronmal, Gregory S.
Lauer, Peter M.
Ruddy, David A.
Thomas, Wineton
Teuchihashi, Zenta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 246240 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 71.7%;
Matches 241; Conservative (
                                                            APPLICANT: Feder, John N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 415-576-0300
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY
                Patent No. 5872237
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: no
MOLECULE TYPE:
                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
```

2473

Gaps

.; 0

```
29911 AATCCCAGCTACTCGGGAGGCTGAGTCAGGAGATCACTTGAACCCAGGAGGCAGAGGTT 29970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2534 GAACTGAGCCAGGATCTTGCCACCATTCCAGCTTGGGCAACAGAGTGAGACCCTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2414 GTGAGACCTCGTTTCTACAATAATTAAAATTAGCCAGGTGGTGGTGCACACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2474 AGICCCAGGIACICAGGAGGCIGAGGIAGIAGATIGITIGAGACIGGGAGGIIGAGGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2294 TCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

4.9%; Score 184; DB 2; Length 246240;
Best Local Similarity 71.7%; Pred. No. 1.6e-27;
Matches 241; Conservative 0; Mismatches 95; Indels 0;
APPLICANT: Thomas, Winston
APPLICANT: Tsuchihashi, Zenta
APPLICANT: Tsuchihashi, Zenta
APPLICANT: Wolff, Roger K.
TITLE OF INVENTION: Megabase Transcript Map: No. 5872237e1
TITLE OF INVENTION: Sequences and Antibodies Thereto
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
STREET: Two Embarcadero Center, 8th Floor
                                                                                                                                                                                                                                                                                                                  STATE: CA.
COUNTRY: USA
ZUD: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/724,394A
FILING DATE: 01-OCT-1996
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             caaaaaaaaaaaaaariraaraigisgaacrarir 30066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTT 2629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature;
| LOGATION: 1..246240
| CHER INFRAMITION: /note= "HLA-H.CONTIG"
US-08-724-394A-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
35,136
ER: 017957-000100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 246240 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECTLE TYPE: cDNA
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Fitte. Renee A.
REGISTRATION NUMBER: 35.136
REFERENCE/DOCKET NUMBER: 017:
TELECOMUNICATION INFORMATION:
TELEPHONE: 415-576-0200
TELEPRAX: 415-576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-724-394A-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16638 CCAGGAGGTCAAGGCTGCAGTGAGCTGTTTGCACCACTGTACTCCAGTCTGGGCAACA 16579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16818 AÁTCCCAGCACTTTGGGAGGCCAAGTGGGGGGAGATCGTTTGAGCTCAAGAGTTCAAGAAC 16759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2458 GGTGGTGCACCCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGA 2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2518 CTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACA 2577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16878 rerearderedrereckakakerrrekakrrrregecekererekerrekarrekreter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2280 TITCAAGICAGIGCICAAAAAGIIICAGAIGIIAAG-CIGGIGAIGCAGIICAIGCCAGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2339 GATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAA-TTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
4.9%; Score 184; DB 1; Length 26764;
Best Local Similarity 74,7%; Pred. No. 9.2e-28;
Matches 257; Conservative 0; Mismatches B5; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16578 GAGCAAGACCCCATCTCAGAAAAAAAAAAAAGTTTCAGATTTTG 16535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2578 GAGTGAGACCCTGTCTCAAAAAAAAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                                                                                                                            COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BEAGET IN FOLOS/MS-DOS
SOUTWARE: PatentIN Release #1.0, Version #1.25
SOUTRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/370,975B
FILING DATE: 10-JAN-1995
CLASSIFICATION NUMBER: US/08/370,975B
FILING DATE: 10-JAN-1995
ATTORNEY/AGRNT INFORMATION:
NAMM: TIMEN $4.103
REFERENCE/DOCKET NUMBER: 20894/80
TELECOMMUNICATION INFORMATION:
TELERPAX: (716)263-1636
TELECOMMUNICATION INFORMATION:
TELERPAX: (716)263-1636
TELERPAX: 
                                                            ADDRESSEE: Nixon, Hargrave, Devans & STREET: Clinton Square, P.O. Box 1051 CITY: Rochester STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-724-394A-20; Sequence 20, Application US/08724394A; Patent No. 587227; GENERAL INFORMATION: APPLICANT: Feder, John N. APPLICANT: Kronmal, Gregory S. APPLICANT: Lauer, Peter M. APPLICANT: Ruddy, David A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: DNA (genomic); POSITION IN GENOME:
; CHROMOSOME/SEGMENT: 4q35
                         NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Nixon, Harg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

ω

ò 셤 ò 셤 ò

```
14735 GGIGGCGTGCACCTGTAGTCCTAGCTAGCAGGGTGAGGTGGGAGGACTGCTTGAGC 14676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14675 CCAGGAGGICAAGGCIGCAGIGAGCIGIGITIGCACCACTACICCAGICIGGGCAACA 14616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2518 CTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAACA 2577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14795 AGCTTAGGCAACATAGTGACAGCTCATCTCTACTGAAAATAAAAAACTTAGCCAGGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2280 ITTCAAGTCAGTGCTCAAAAGTTTCAGATGTTAAG-CTGGTGATGCAGTTCATGCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14915 TGTCATGCTGGTGCAAAAGGTTTCAGATTTTGGGCCAGGTGCAGTAGTTCATGCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2458 GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGGATTGTTTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2339 GAICCGAGIACTITGGGAAGCCAAGACAGGIGGAICTCTTGAGCCCCAGGAGTTTGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2399 AGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAA-TTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14615 GAGCAAGACCCCATCTCAGAAAAAAAAAAAAAAAAAATTTCAGATTTTG 14572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2578 GAGTGAGACCCTGTCTCAAAAAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-370-975B-1/C

Sequence 1, Application US/08370975B

Fatent No. 5622861

GENERAL INFORMATION:

APPLICANT: Maley, Frank

APPLICANT: Maley, Gladys F.

APPLICANT: Walex, Karen X.B.

TITLE OF INVENTION: Human Deoxycytidylate Deaminase Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                        COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT NUMBER: US/08/370,975B
FLING DATE: 10-JAN-1995
CLASSIFICATION NUMBER: 195
ATTORNEY/AGENT INFORMATION:
NAME: Timian, Susan J.
REGISTRATION NUMBER: 20894/80
TELECOMMUNICATION NUMBER: 20894/80
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 184; DB 1;
Pred. No. 8.6e-28;
0; Mismatches 85
                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Nixon, Hargrave, Devans & Doyle STREET: Clinton Square, P.O. Box 1051
CITY: Rochester STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (716)263-1636
TELEFAK: (716)263-1600
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
LENGTH: 20303 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA (genomic)
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 4435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 74.7%;
Matches 257; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-370-975B-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14773 caddiacadradachchidahahiccchdibchiriadahadcchhadaradahch 14714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTAGGATTGTTTGAGACTGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACAT 2561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2495
                                                                                                      203 AAAATTAGCTGGGCATGGTGGGGGGCCTGTAATCCCAGTTACTTGGGAGGCTAAGGTA 262
                                                                                                                                                                                                 263 GCAGAATTACTTGAATCTGGAGGCAGAGGTTGCAGTGGCCAAGATTGCGCCACTGCAC 322
143 GTCAGGAGTTCAAGAACAACCTCGCCAACATGGTGAAACCCCCATCTCTACTAAAAATACA 202
                                                                                                                                                                                                                                                                   2442 AAAATTAGCCAGGTGTGGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2496 GAGGTAGTAGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2316 CTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2376 CITGAGCCCAGGAGTITGAGGCCAGACTGCACACACAGTGAGACCTCGTTTCTACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATTAAAAAATTAGCCAGGTGTGGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14653 AATACAAAATTATGCAGGTGTGGTGCTGCATGCCTGTAGTCCCAGCTACTCAGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14593 GAGGCAGGAGAATAGCTTGAGCCTGGGATGCGGAGGTTGCGGTGAGCCGAGATCACGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14533 CTGCACTCCAGTCTGGGTGAGAGTGTCAGACCTGTCTCAAAACTAAA 14481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: WEL, MING-Hui et al TITLE OF INVENTION: ISOLATED HUMAN PHOSPHODIESTERASE TITLE OF INVENTION: ISOLATED HUMAN PHOSPHODIESTERASE TITLE OF INVENTION: PROPEINS, NUCLEIC ACID MOLECULES ENCODING TITLE OF INVENTION: PHOSPHODIESTERASE PROTEINS, AND USES THEREOF CURRENT APPLICATION NUMBER: US/09/754,250 CURRENT FILING DATE: 201-01-05 NUMBER OF SEQ ID NOS: 5 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 3: LENGTH: 111282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.9%; Score 184.2; DB 3; Length 111282; 76.8%; Pred. No. 1.2e-27; tive 0; Mismatches 68; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
US-08-370-975B-6/c
Sequence 6, Application US/08370975B
Sequence 6, Application US/08370975B
Sequence 6, Application US/08370975B
Sequence 6, Application US/08370975B
Sequence 6, Application:
APPLICANT: Maley, Frank
APPLICANT: Meiner, Karen X.B.
TITLE OF INVENTION: Human Deoxycytidylate Deaminase Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/09754250 Patent No. 6376225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: misc_feature
; LOCATION: (1)...(111282)
; OTHER INFORMATION: n = A,T,C or G
US-09-754-250-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 76.8
Matches 225; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 9
US-09-754-250-3/c
                                                                                                                                                             2502
                                                                                                                                                                                                                                                                      2562
                                                                                                                                                                                                                                                                                                                       323
```

Query Match

g ò

à g 8 g à gg 8

FEATURE:

14856

5;

14736

0

```
154282 ATTGCTTGAACCTGGGAAGCAGAGGTTGCAGTGAGCGGAGATCGCACCACTGCACTCCAG 154341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 154162 GAATTTGAGACCAGTCTGGCCAATACGGTGAAACCCCTGTTTCTACTAAAAATACAAAAA 154221
                                                                                                                                                                                                                                                                                                                                                                                                                      154161
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2382 CCCAGGAGTITGAGGCCAGACTGCACAACACAGGACCTCGTITCTACAAATAATAA 2441
                                                                                                                                                                                                                                                                                                                                                                              2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83 IGGIGGCICAIGCCIGIAAICCIAGCACTIIGGGAGGCIGAGGCAGGIGGAICAITIGAG 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2262 AAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2322 ATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23 AAAGGAAAAAAAAATTTTGATGGTTAGTCACCCAATAAATGTTCTGGTTGGCCGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                      2327 GITCATGCCAGIGAICCGAGIACIIIGGGAAGCCAAGACAGGIGGAICTCIIGAGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2387 GAGTTTGAGGCCAGACTGCACACACACGGGGCCTCGTTTCTACAAATAATTAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGCCAGGTGTGGTGCACACCTGTAGTCCCAAGGTACTCAGGAGGCTGAGGTAGTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGTTTGAGACTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
4.9%; Score 184.8; DB 4; Length 161652;
Best Local Similarity 77.1%; Pred. No. 1e-27;
Matches 225; Conservative 0; Mismatches 67; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Jobert, S.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: BSTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION WUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 13359
LENGTH: 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 184.4; DB 4;
Pred. No. 2.6e-28;
2; Mismatches 108;
  CURRENT APPLICATION NUMBER: US/09/497,855A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 13959, Application US/09621976 Patent No. 6639063
PENERAL INFORMATION: APPLICANT: Dumas Milne Edwards, J.B.
                   CURRENT FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: 60/120,592
PRIOR FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: 60/118,760
PRIOR FILING DATE: 1999-02-05
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Patentin version 3.0
SEQ ID NO 40
LENGTH: 161652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Homo sapiens;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-621-976-13959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo US-09-621-976-13959
                                                                                                                                                                                                                                                           US-09-497-855A-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69957 THAAAAATTAGCTGGGCATGGTGGCACCCACCTGTAGCCCCCAGCTACTTGAGAGGCTGA 70016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAA 2437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTAAAAATTAGCCAGGTGTGGTGGTGCACCTGTAGTCCCCAGGTACTCAGGAGGCTGA 2497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACC 2557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCT 2377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 40, Application US/09497855A

Sequence 40, Application US/09497855A

Patent No. 6605432

GENERAL INFORMATION:

APPLICANT: Huang, Tim

TITLE OF INVENTION: HIGH-THROUGHPUT METHODS FOR DETECTING DNA METHYLATION
PILE REFERENCE: UM01523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 81001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 185; DB 4;
Pred. No. 7.7e-28;
0; Mismatches 65
OTHER INFORMATION: 17-41-250.mis complement
NAME/KEY: primer_bind
COCATION: 42199.4221
OTHER INFORMATION: 20-841-149.mis
NAME/KEY: primer_bind
IOCATION: 42219..42237
OTHER INFORMATION: 20-841-149.mis complement
NAME/KEY: primer_bind
LOCATION: 45423..45441
OTHER INFORMATION: 20-841-149.mis complement
OTHER INFORMATION: 20-841-149.mis
                                                                                                                                                                                                                 OTHER INFORMATION: 20-842-115.mis
NAME/KEY: primer_bind
LOCATION: 45443-135.mis complement
NAME/KEY: primer_bind
LOCATION: 77039-77057
OTHER INFORMATION: 20-853-415.mis
NAME/KEY: primer_bind
LOCATION: 77039-77057
OTHER INFORMATION: 20-853-415.mis complement
NAME/KEY: misc_binding
LOCATION: 1227-1251
OTHER INFORMATION: 20-853-415.mis complement
NAME/KEY: misc_binding
LOCATION: 1227-1251
OTHER INFORMATION: 20-853-415.mis complement
NAME/KEY: misc_binding
LOCATION: 1227-1251
OTHER INFORMATION: 20-828-311.probe
NAME/KEY: misc_binding
LOCATION: 12335-12359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONTRER INFORMATION: 20.841-149.probe
NAME/KEY: misc binding
LOCATION: 45430..45484
COTHER INFORMATION: 20-842-115.probe
NAME/KEY: misc binding
LOCATION: 77046..77070
COTHER INFORMATION: 20-853-415.probe
US-09-750-580-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: 17-42-319 probe NAME/KEY: misc binding LOCATION: 15229..15253 OTHER INFORMATION: 17-41-250.probe NAME/KEY: misc binding LOCATION: 42206..42230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 77.5%;
Matches 224; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 7
US-09-497-855A-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           70077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

2321

82

ö

g ò g ò g ò g ò

```
: polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : polymorphic base C or
                                                                                                                                                                                                                                                                            : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                  : polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COTHER INFORMATION: 20-828-311.mis

OTHER INFORMATION: 20-828-311.mis

NAME/KEY: primer_bind
LOCATION: 1240..1258

OTHER INFORMATION: 20-828-311.mis complement
NAME/KEY: primer bind
LOCATION: 12328..12346

OTHER INFORMATION: 17-42-319.mis
NAME/KEY: primer bind
LOCATION: 12348..12366

OTHER INFORMATION: 17-42-319.mis complement
NAME/KEY: primer bind
LOCATION: 15222..15240

OTHER INFORMATION: 17-41-250.mis
                                                                                                                                                                                                 UNCATION: 1239
OTHER INFORMATION: 20-828-311 : polymorphi
NAME/KEX: allele
LOCATION: 12347
OTHER INFORMATION: 17-42-319 : polymorphi
LOCATION: 15247
OTHER INFORMATION: 17-41-250 : polymorphi
LOCATION: 15241
OTHER INFORMATION: 20-841-149 : polymorphi
LOCATION: 42218
OTHER INFORMATION: 20-841-149 : polymorphi
LOCATION: 45442
OTHER INFORMATION: 20-842-115 : polymorphi
LOCATION: 45442
OTHER INFORMATION: 20-853-415 : polymorphi
LOCATION: 3599. 349
OTHER INFORMATION: 20-853-415 : polymorphi
LOCATION: 359. 349
OTHER INFORMATION: 20-853-415 : polymorphi
LOCATION: 359. 349
OTHER INFORMATION: 20-828.pu
LOCATION: 1357. 1377
OTHER INFORMATION: 20-828.pu
LOCATION: 1357. 1377
OTHER INFORMATION: 20-828.pu
LOCATION: 12029. 12050
OTHER INFORMATION: 17-42.pu
NAME/KEY: primer_bind
LOCATION: 12029. 12050
OTHER INFORMATION: 17-42.pu
NAME/KEY: primer_bind
LOCATION: 12029. 12050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: 17-42.rp complement
NAME/KEY: primer_bind
LOCATION: 14992..15012
OTHER INFORMATION: 17-41.pu
NAME/KEY: primer_bind
LOCATION: 15460..15482
OTHER INFORMATION: 17-41.rp complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            complement
                                                                OCATION: 15969..17969
THER INFORMATION: 3'regulatory region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 45328...45347
OTHER INFORMATION: 20-842.pu
NAME/KEY: primer bind
LOCATION: 45863...45883
OTHER INFORMATION: 20-842.rp
NAME/KEY: primer bind
LOCATION: 76644...76644
OTHER INFORMATION: 20-853.pu
NAME/KEY: primer bind
LOCATION: 77166...77185
OTHER INFORMATION: 20-853.rp
NAME/KEY: primer bind
LOCATION: 77166...77185
OTHER INFORMATION: 20-853.rp
NAME/KEY: primer bind
LOCATION: 1220...1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: primer_bind
LOCATION: 42070. 42090
OTHER INFORMATION: 20-841.pu
NAME/KEY: primer bind
LOCATION: 42572. 42591
OTHER INFORMATION: 20-841.rp c
NAME/KEY: primer bind
LOCATION: 45328. 45347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: 17-
NAME/KEY: primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Duclert, Aymeric
APPLICANT: Bouqueleret, Lydie
APPLICANT: Bbets-Reed, Dana
APPLICANT: Sales-Reed, Dana
APPLICANT: Sales-Cid, Luisa
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INHIBITING NEOPLASTIC CELL GROWTH
FILE REFERENCE: 89 103. CID
CURRENT APPLICATION NUMBER: US/09/750,580
PRIOR APPLICATION NUMBER: US 09/599,362
2417 AGACCTCGTTTCTACAATAATAATTAAAAATTAGCCAGGTGTGGTGCACCTGTAGT 2476
                                                                                                                                                                                                                                                                                                                                                                          2477 CCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAA 2536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2537 CTGAGCCAGGATCTTGCCACCACACTTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTCAA 2596
                                                                                    594 AGCCGAGGTGGGTGGATCATCTGAGGTCTAGGAGTTTAAGACCAGCCTGGCCAACATGGCA 653
                                                                                                                                                                                                                                                                                                                                                                                                                                               Yen, Frances
Denison, Blake
Bour, Barbara
Bihain, Bernard
Dumas Milne Edwards, Jean-Baptiste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2000-06-21
PRIOR APPLICATION NUMBER: PCT/IB00/0101
PRIOR PLLING DATE: 2000-06-21
PRIOR PLLING DATE: 100-106-21
PRIOR APPLICATION NUMBER: PCT/IB99/02058
PRIOR APPLICATION NUMBER: US 49/469/099
PRIOR FILING DATE: 1999-12-21
PRIOR APPLICATION NUMBER: US 60/113,686
PRIOR FILING DATE: 1998-12-22
PRIOR RAPLICATION NUMBER: US 60/141,032
PRIOR PRILING DATE: 1999-06-25
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PALENT. PRIOR: PRIOR P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2597 AAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   834 AAAAAAAGAGAGATTTTTTTTTG 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPAGE TO THE CONTROL OF THE CONTRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09750580 Patent No. 6455280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 14271. 15968
OTHER INFORMATION: exon 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: exon
LOCATION: 13470..13526
OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: exon
LOCATION: 13641..13752
OTHER INFORMATION: exon
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 1
LENGTH: 81001
```

```
FEATURE:
NAME/KEY: allele
LOCATION: 6375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: allele
LOCATION: 4170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: allele
         NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  : variable motif ATTTA or TTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: allele
LOCATION: 2844
OTHER INFORMATION: 10-513-262 : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WANG-KEY: allele
LOCATION: 1128
LOCATION: 1028
THER INFORMATION: 10-508-191 : polymorphic base C or T
FRANG-KEY: allele
LOCATION: 1182
DIRER INFORMATION: 10-508-245 : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : polymorphic base A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : polymorphic base A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 1570

NIHER INFORMATION: 10-509-295 : deletion of C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 2323
OTHER INFORMATION: 10-511-337 : insertion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WAME/KEY: misc feature
LOCATION: 17555..20674
DTHER INFORMATION: 3'regulatory region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEX: allele
LOCATION: 2623
OTHER INFORMATION: 10-512-318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-513-250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OCATION: 1559
THER INFORMATION: 10-509-284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: allele
LOCATION: 1827
OTHER INFORMATION: 10-510-173
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: allele
LOCATION: 2341
OTHER INFORMATION: 10-512-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 2048
OTHER INFORMATION: 10-511-62
FEATURE:
                                                                                                                                                                                                                                                                                                                       NAME/KEY: exon
LOCATION: 16775..16945
OTHER INFORMATION: exon 13
                                                                                       FEATURE:
NAME/KEY: exon
LOCATION: 12854..13023
OTHER INFORMATION: exon 10
                                                                                                                                                                                                                                                      NAME/KEY: exon
LOCATION: 16567..16667
OTHER INFORMATION: exon 12
                                                                                                                                                                                                LOCATION: 13308..13429
DIHER INFORMATION: exon 11
                                                                                                                                                                                                                                                                                                                                                                                                           OCATION: 17063..17554
THER INFORMATION: exon 14
                                                       LOCATION: 12254..12340
OTHER INFORMATION: exon 9
OTHER INFORMATION: exon 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY: allele
LOCATION: 2832
OTHER INFORMATION: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WAME/KEY: allele
                                                                                                                                                                FEATURE:
NAME/KEY: exon
```

```
2297 AAAAGTITICAGATGTIAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGA 2356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 73.2%; Pred. No. 3.7e-28;
Matches 238; Conservative 0; Mismatches 87; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 6484
OTHER INFORMATION: 10-347-220 : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 6467
OTHER INFORMATION: 10-347-203 : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                                                                                                                                                                   Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 6019
OTHER INFORMATION: 10-346-141 : polymorphic base A or PEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : polymorphic base C or
LOCATION: 2934

LOCATION: 2934

OTHER INFORMATION: 10-513-352 : polymorphic base A or G
PEATURE:
NAME/KEY: allele
LOCATION: 2947

OTHER INFORMATION: 10-513-365 : polymorphic base A or G
PEATURE:
NAME/KEY: allele
LOCATION: 3802

OTHER INFORMATION: 12-206-81 : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : polymorphic base G or
                                                                                                                                                                                                                                                                                                            NAWE/KEY: allele
LOCATION: 4088
OTHER INFORMATION: 12-206-366 : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: allele
LOCATION: 5903
OTHER INFORMATION: 10-346-23 : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAMENTEY: allele
LOCATION: 6338
OTHER INFORMATION: 10-347-74 : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                             : polymorphic base C
                                                                                                                                                                                                                                                                  : deletion of
                                                                                                                                                                                                          FEATURE:
NAME/KEY: allele
LOCATION: 4062
OTHER INFORMATION: 10-343-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 6141
OTHER INFORMATION: 10-346-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 6183
OTHER INFORMATION: 10-346-305
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: allele
LOCATION: 6429
OTHER INFORMATION: 10-347-165
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: 10-347-111
                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 4109
OTHER INFORMATION: 10-343-278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: 10-343-339
```

ó

```
Sequence 651, Application US/10170097

Sequence 651, Application

APPLICANT: Blumenfeld, Marta

APPLICANT: Blumenfeld, Marta

APPLICANT: Cohen, Annick

TITLE OF INVENTION: BlatLEDIC MARKERS DERIVED FROM GENOMIC REGIONS

FILE REFERENCE: GEN-T114XC2D1

TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM

FILE REFERENCE: GEN-T114XC2D1

CURRENT FILING DATE: 2002-06-10

PRIOR APPLICATION NUMBER: US 09/641,638

PRIOR PELING DATE: 2000-02-11

PRIOR FILING DATE: 1999-06-07

PRIOR FILING DATE: 1999-03-12

SOFTWARE: PATENTLY

SEQ ID NO 651

LANCTH: 20674
       774 GTGAGCCGAGATCACGCCACTGCACTCTAGCCTGGGCAACAGAGCCAAGACTCTATCTCAA 833
                                                                                   2597 AAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                             834 AAAAAAAAAAAABABAAATTTTTTTTTTTT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: 1123..3123
OTHER INFORMATION: 5'regulatory region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 5552..5633
OTHER INFORMATION: exon 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION: exon 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 6349..6509
OTHER INFORMATION: exon 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 7379..7522
OTHER INFORMATION: exon 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 5758..5880
OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: excn
LOCATION: 3124..3297
OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: exon
LOCATION: 3871..4072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: exon
LOCATION: 8645..8854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5996..6099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: exon
LOCATION: 5996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION:
                                                                                                                g
                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2357 AGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTG 2416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCAGGIACTCAGGAGGTGAGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAA 2536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2537 CTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTCAA 2596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       654 AAACCTCGTCTCTACTAAAAATACAAAAACTAGCCAGGCTTGGTGGTGCACACCTGTAAT 713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         714 CCCAGCTACTCAGGAAGCTGAGGCAAGAGATCGCTTGAACCTGGGAGGTGGA 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2297 AAAAGTITCAGAIGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         534 AAAAATCTGAAAAGCTGGCTGGCATGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2417 AGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGGTGGTGCTACACTCTGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 4.9%; Score 185.8; DB 4; Length 20674; Best Local Similarity 73.2%; Pred. No. 3.7e-28; Matches 238; Conservative 0; Mismatches 87; Indels 0;
       : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : polymorphic base G or C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : polymorphic base A or C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : polymorphic base A or G
                                                                         : polymorphic base A or
                                                                                                                                                : polymorphic base A or
                                                                                                                                                                                                                                                                                       : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                            : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                 : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : polymorphic base C or
                                                                                                                                                                                                                   : polymorphic base A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : deletion of CTG
                                                                                                            LOCATION: 6484
O'THER INFORMATION: 10-347-220:
NAME/KEY: Allele
LOCATION: 6534
O'THER INFORMATION: 10-347-271:
NAME/KEY: Allele
LOCATION: 6611
O'THER INFORMATION: 10-347-348:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCATION: 9777
COTHER INFORMATION: 10-349-216;
NAME/KEY: 311e1e
LOCATION: 9785
OTHER INFORMATION: 10-349-224;
NAME/KEY: 311e1e
LOCATION: 8926
OTHER INFORMATION: 10-349-368;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: 13341

OTHER INFORMATION: 10-507-170 :

MAME/KEY: allele

LOCATION: 13492

OTHER INFORMATION: 10-507-321 :

NAME/KEY: allele

LOCATION: 13524

OTHER INFORMATION: 10-507-353 :

NAME/KEY: allele

LOCATION: 13535
OTHER INFORMATION: 10-347-165
                      NAME/KEY: allele
LOCATION: 6467
CTHER INFORMATION: 10-347-203
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                      NAME/KEY: allele
LOCATION: 7668
OTHER INFORMATION: 10-348-391
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 8703
OTHER INFORMATION: 10-349-142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: allele
CCCATION: 12429
DTHER INFORMATION: 10-350-332
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 8608
OTHER INFORMATION: 10-349-47
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                              OCCATION: 8658
OTHER INFORMATION: 10-349-97
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: 10-350-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION:
```

g

à

역 경 경

à

g

ò

```
: variable motif ATTTA or TTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COTHER INFORMATION: 10-512-36 : polymorphic base G or C NAME/KEY: allele
LOCATION: 2653
COTHER INFORMATION: 10-512-318 : polymorphic base A or G OTHER INFORMATION: 10-512-318 : polymorphic base A or G OTHER INFORMATION: 10-513-250 : polymorphic base A or G OTHER INFORMATION: 10-513-250 : polymorphic base A or G NAME/KEY: allele
LOCATION: 2844
GOTHER INFORMATION: 10-513-262 : polymorphic base C or T NAME/KEY: allele
LOCATION: 2934
GOTHER INFORMATION: 10-513-352 : polymorphic base A or G NAME/KEY: allele
LOCATION: 2947
GOTHER INFORMATION: 10-513-355 : polymorphic base A or G NAME/KEY: allele
LOCATION: 3802
COTHER INFORMATION: 11-206-81 : polymorphic base A or G NAME/KEY: allele
LOCATION: 3802
COTHER INFORMATION: 11-206-81 : polymorphic base A or G NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: allele
LOCATION: 4062
OTHER INFORMATION: 10-343-231 : deletion of C
NAME/KEY: allele
LOCATION: 4088
OTHER INFORMATION: 12-206-366 : polymorphic base C or T
NAME/KEY: allele
LOCATION: 4109
OTHER INFORMATION: 10-343-278 : polymorphic base C or T
NAME/KEY: allele
LOCATION: 4170
OTHER INFORMATION: 10-343-339 : polymorphic base G or T
NAME/KEY: allele
LOCATION: 5903
OTHER INFORMATION: 10-346-23 : polymorphic base A or G
NAME/KEY: allele
LOCATION: 6019
OTHER INFORMATION: 10-346-141 : polymorphic base A or G
NAME/KEY: allele
LOCATION: 619
OTHER INFORMATION: 10-346-141 : polymorphic base A or G
NAME/KEY: allele
LOCATION: 619
OTHER INFORMATION: 10-346-263 : polymorphic base A or G
NAME/KEY: allele
                                                 NAME/KEY: allele
LOCATION: 1182
COTHER INPORMATION: 10-508-245 : polymorphic base C or T
NAME/KEY: allele
LOCATION: 1559
COTHER INFORMATION: 10-509-284 : polymorphic base C or T
NAME/KEY: allele
LOCATION: 1570
COTHER INFORMATION: 10-509-295 : deletion of C
NAME/KEY: allele
LOCATION: 1827
COTHER INFORMATION: 10-510-173 : variable motif ATTTA or TTTT
NAME/KEY: allele
LOCATION: 2048
COTHER INFORMATION: 10-511-62 : polymorphic base C or T
NAME/KEY: allele
LOCATION: 2323
COTHER INFORMATION: 10-511-337 : insertion of T
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: 10-347-111 : polymorphic base G or C NAME/KEY: allele
LOCATION: 6429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION: 10-346-305 : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: 10-347-74 : polymorphic base A or G
LOCATION: 1128
OTHER INFORMATION: 10-508-191 : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: allele
LOCATION: 6183
                             APPLICANT: BLUGGLETCH, Lydie
APPLICANT: Chumakov, Ilya
TITLE OF INVENTION: BIALLELIC MARKERS DERIVED FROM GENOMIC REGIONS CARRYING
TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM
TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM
TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM
CURRENT APPLICATION NUMBER: US 09/502,330
PRIOR FILING DATE: 1090-05-07
PRIOR APPLICATION NUMBER: US 60/133,200
PRIOR FILING DATE: 1999-05-07
PRIOR FILING DATE: 1999-05-07
PRIOR FILING DATE: 1999-03-23
PRIOR FILING DATE: 1999-03-23
PRIOR FILING DATE: 1999-02-12
PRIOR FILING DATE: 1999-02-12
PRIOR FILING DATE: 1999-02-12
PRIOR FILING DATE: 1999-02-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 17063..17554
OTHER INFORMATION: exon 14
NAME/KEY: misc. feature
LOCATION: 17555..20674
OTHER INFORMATION: 3'regulatory region
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
LOCATION: 1123..3123
OTHER INFORMATION: 5'regulatory region
NAME/KEY: exon
LOCATION: 3124..3297
OTHER INFORMATION: exon 1
                 Blumenfeld, Marta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 16775..16945
OTHER INFORMATION: exon 13
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOCATION: 12854..13023
THER INFORMATION: exon 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: exon 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 16567..16667
OTHER INFORMATION: exon 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: exon
LOCATION: 7379..7522
OTHER INFORMATION: exon 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: exon
LOCATION: 8645..8854
OTHER INFORMATION: exon 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: exon
LOCATION: 3871..4072
OTHER INFORMATION: exon 2
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOCATION: 5552..5633
OTHER INFORMATION: exon 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 5758..5880
OTHER INFORMATION: exon 4
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COCATION: 5996..6099
OTHER INFORMATION: exon 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 6349..6509
STHER INFORMATION: exon 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: exon 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OCATION: 12254..12340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OCATION: 13308..13429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16567..16667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Pater
SEQ ID NO 651
LENGTH: 20674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IYPE: DNA
```

us-10-005-907-1.rni

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2276 ACTAITICAAGICAGGGCTCAAAAAGTITCAGAIGITAAGCIGGIGAIGCAGGITCAIGCC 2335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1955 ACATÍTÍCCCATITCÍGICTCATCAAAACTGAAGÍTÁGCTGGGÍGTGGTGGCTCATGCC 2014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2336 AGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAG 2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2396 GCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGT 2455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2194 ACCCGGGAGGCGGAGGTTGCAGTGAGGCTAGTGCCACTGCACTCCAGCCTGGGTGA 2253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMENBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C59
CURRENT APPLICATION NUMBER: US/10/140,002
CURRENT APPLICATION NUMBER: 202-05-06
Prior Application removed - See Palm or File Wrapper
NUMBER OF SEQ ID NOS: 550
LENGTH: 2336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2015 TGTAATCCCAGCACTTTGGG-GGCCAAGGAGGTGGATCACTTGAGATCAGGAGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2516 GACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 4; Length 2336;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 5.0%; Score 186.6; DB 4; Length; Best Local Similarity 73.6%; Pred. No. 1.5e-28; Matches 251; Conservative 0; Mismatches 89; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAGTGAGACCCTGTCTCAAAAAAAAAAAAAAAGTTTCAGA 2616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 383, Application US/10140002
Patent No. 6725730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: unsure
COCATION: 1620, 1673
CTHER INFORMATION: unknown base
US-10-140-002-383
                                                                                                            Desnoyers, Luc
Filvaroff, Ellen
Gao, Wei-Qiang
Gerritsen, Mary E.
                                                                                                                                                                                                                                                         Stewart, Timothy A.
                                                                                                                                                                        Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                        APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
                                                                                                                                                                                                                                                                                          Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                               Sherwood, Steven
                                                                                                                                                                                                                                            Smith, Victoria
                                                                                                                                                                                                                                                                                Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
US-09-620-312D-967
-10-140-002-383
                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2576
                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2254
                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

; Sequence 967, Application US/09620312D

```
1034 GGGAGGATGACTTGAGGCCAGGAGTTGGAGACCAGCCTGGCCAACAAGAGGCCTGT 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2426 TICTACAAATAATTAAAATTAGCCAGGTGTGGTGGTGCACACCTGTAGTCCCAGGTAC 2485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      974 AGAAGATGGCCGGGCGTGGTGGCTCATGCCTGTAATTCCAGCACTTTGGGAGGCTAAGGC 1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2486 TCAGGAGGCTGAGGTAGGATTGTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAG 2545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1154 rcrádakáctrandezkadakáraktracritánaccradakácakákácritácantakáccan 1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2306 AGAIGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2366 AGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1426;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                       APPLICANT: Drmanac, Radoje T.

TITLE OF INVENTION: Polypeptides
TITLE OF INVENTION: Polypeptides
FILE REPERENCE: 784CIP2B
CURRENT APPLICATION NUMBER: US/09/620,312B
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR RILING DATE: 2000-04-25
PRIOR FILING DATE: 2000-04-25
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
SOFTWARE: Pt_Genes Version 1.0
SEQ ID NO 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
4.9%; Score 186.2; DB 4;
Best Local Similarity 75.9%; Pred. No. 1.5e-28;
Matches 230; Conservative 0; Mismatches 73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-09-641-638-651
Sequence 651, Application US/09641638
Parent No. 6432648
GENERAL INFORMATION:
                                                                                                                                                                  Xue, Aidong J.
Yang, Yonghong
Wang, Jian-Rui
Zhou, Ping
Ma, Yunqing
Mang, Unnrui
Wang, Zhiwei
                                                                                    Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
Wehrman, Tom
APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Zhang, Jie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2606 AAA 2608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1274 AAA 1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-620-312D-967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 1426
                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
```

ö

```
1187 rendeadderdaddeadadaarearingaaceerddaddeaddarddaardadeea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LOCATION: (47)..(991)
US-09-584-568C-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA 2608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA 1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1307
                                                                                                                                                                                                                                                     180
180
179.6
179.6
182
181.8
181.8
180.6
180.6
180.6
180.6
180.6
180.6
180.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGIH:
 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              651, App
651, App
1, App
10, Appl
13959, A
3, Appl
11, Appl
12, Appl
12, Appl
13, Appl
13, Appl
14, Appl
15, Appl
16, Appl
16, Appl
17, Appl
17, Appl
18, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Appli
Sequence 3, Appli
Sequence 1380, Ap
                                                                                                                              November 18, 2004, 13:35:33 ; Search time 288 Seconds (without alignments) 9284.680 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued_Patents NA:*

.: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

?: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*

i: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

i: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

:: /cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*

:: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
                    GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-584-568C-1

US-10-140-002-383

US-09-620-3120-967

US-09-641-638-651

US-10-170-097-651

US-09-750-580-1

US-09-750-580-1

US-09-750-580-1

US-09-74-276-13959

US-09-74-276-13959

US-08-370-9758-1

US-08-370-9758-1

US-08-370-9758-1

US-08-370-9758-1

US-08-370-9758-1

US-08-370-9758-1

US-08-374-394A-20

US-08-724-394A-21

US-08-724-394A-21

US-09-124-394A-21

US-09-124-394A-21

US-09-124-394A-21

US-09-124-394A-1

US-09-124-394A-1

US-09-124-394A-1

US-09-127-5

US-09-127-5

US-09-212-971-5

US-09-212-971-5

US-09-672-777-30

US-09-672-777-30

US-09-672-777-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-804-471A-3
US-10-238-709-3
US-09-023-655-1380
                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-916-204-3
                                                                                                                                                                                                                                                                                                                              824507 seqs, 355394441 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                            using sw model
                                                                                                                                                                                                                                                                           IDENTITY_NUC Gapcp 10.0
                                                                                                                                                                                                                                                                                                                                                                                                      seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match Length DB
                                                                                                                                                                                                    US-10-005-907-1
3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           174493
174493
1855
                                                                                              nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44444444444444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182.8
182.6
182.6
182.6
182.6
182.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187.8
186.6
186.6
185.8
185.8
185.8
184.4
184.2
184.2
184.2
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                183.8
183.4
183.4
                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                          Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB
Maximum DB
                                                                                              OM nucleic
                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                  Run on:
                                                                                                                                                                                                        Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            000
```

```
Sequence 9, Appli
Sequence 7, Appli
Sequence 1, Appli
Sequence 10, Appli
Sequence 2552, Ap
Sequence 3, Appli
Sequence 10146, A
Sequence 6, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1127 crcracrarararacararitagecresceresresreseaecrerarareceasecra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2486 TCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1007 adaadanggccoodcongredrochtangccnonaarrccadcatriogdaggcraadgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2426 TICTACAAATAATTAAAAATTAGCCAGGTGTGGTGCTGCACCTGTAGTCCCAGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2306 AGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                  Sequence 42, 8 Sequence 42, 8 Sequence 11, Sequence 11, Sequence 9, M Sequence 7, M Sequence 7, M
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/09584568C;
Patent No. 6500657;
GENERAL INPORMATION:
APPLICANT: Glucksmann, Maria, Alexandra et al.
TITLE OF INVENTION: 3167, A NOVEL HUMAN HYDROLASE AND USES THEREFOR FILE REFERENCE: MNI-140
CURRENT APPLICATION NUMBER: US/09/584,568C
CURRENT FILING DATE: 2000-05-31
PRIOR APPLICATION NUMBER: 60/193,954
PRIOR FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin Ver. 2.0
               Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1332;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 5.0%; Score 187.8; DB 4; Best Local Similarity 76.2%; Pred. No. 7.2e-29; Matches 231; Conservative 0; Mismatches 72;
         US-09-526-193A-16
US-09-526-193A-16
US-10-067-422-8
US-09-716-129-42
US-09-988-113-42
US-09-544-398B-1
US-09-543-771-11
US-09-543-771-1
US-09-543-771-1
US-09-543-771-9
US-09-543-771-9
US-09-543-771-9
US-09-543-771-9
US-09-687-744-7
US-09-687-744-7
US-09-621-976-10146
US-09-798-096-10
US-09-701-376-10146
US-09-821-976-10146
                                                                                                                                                                                                                                                                                                                                                                           ALIGNMENTS
               4768
107820
1504
1519
44848
466933
66933
66933
72049
72604
72604
72604
72604
72604
72604
72604
```

ö

This Page Blank (uspto)

Search completed: November 19, 2004, 02:51:07 Job time : 3587 secs

us-10-005-907-2.rge

7 5	AUTHORS Later, J., Lincoln, S.E., Altus, C.M., Dufour, G., Chalup, M., AUTHORS Hillman, J.L., Jones, A.L., Yu, J.Y., Wright, R.J., Gietzen, D., Yap, P., Dahl, C.R., Momiyama, M.G., Bradley, D., Rohargi, S., Harris, B., Rosebery, Ann, M., Gerstin, E.H., Peralta, C.H., David, M.H., Panzer, Scott, R., Flores, V., Daffo, A., Marwaha, R., TITLE Scretcry molecules JOURNAL Patent: WO 02020756-A 46 14-MAR-2002; Incyte Genomics, Inc. (US) FEATURES Location/Qualifiers Source 1. 1643	/ Organism="Homo sapiens" / Mol_Lype="genomic DNA" / Ab xref="taxon:9606" / NoTe="Incyte ID No: LG:018739.2:2000SEP08" Alignment Scores: 5.22e-07 Length: 1643 Score: 159.00 Matches: 47 Percent Similarity: 50.64% Conservative: 32	30.13\$ Mismatches: 22.24\$ Indels: 6 Gaps: ) x AX740457 (1-1643)  nTyrLeuLeuArglysLeuSerCysLeuGl iTTCTGCTGAGAGAAACAGGCGCAGCA	LysLysGlyAsnProAspGluGluArgLysArg	1216 1273 62	:::
Db 404 GGGAACTCTGCTGAGGATACTATGAGAATGTTCCCTGCAAAGCTCAGAGAGG 463  Oy 102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121  Db 464 TCCTTGGGAGGACTGAGACTACTTCTACATATGCCTTCTACAGACGCCCAGG 523  Oy 122 SerCysThrHisGluHisAspTyrGluValYalPheProHis 135  Db 524 CATGCCCGATCCCCAGAAGATGAATTCTCTTCTACAGACCCCAGG 523  CQ733169	CQ733169 CQ733169 CQ733169 CQ733169 CQ733169 CQ733169.1 GI:42315682 Homo sapiens (human) M Homo sapiens (human) M Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homc Venter, C.J., Adams, M.C., Li, P.W. and Myers, E.W. Kits, Such as nucleic acid arraye	humanexons or transcripts, for detecting expression and other uses thereof JOURNAL Patent: WO 02068579-A 19103 06-SEP-2002;  FEATURES Location (NY) (US) Cocation/Qualifiers FEATURES 1. 2505 (Organism="Homo gapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606"	Alignment Scores:  1.35e-07 Length: 2505  Pred. No.:  Score:  166.50 Matches: 43  Percent Similarity: 34.68 Mismatches: 46  Query Match: 23.29 Indels: 5  DB: 6 Gaps: 4	US-10-005-907-2 (1-135) x CQ733169 (1-2505)  QY	2122 CTCATTTTGAAAGGGGCAAGATTCCCAAAACGAAAATGAAAATGTCATCTACT 54 SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThrVallleAsn 2179 CCCATCCAGGACAATGTTGACCAGACCTACTCAGAGGGGGGGTGTGTTACCCAGACCAGCTGCTATACCCTCATCAAT	Oy 74 HisIleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsn11e 92  2239 CATCGGGTTCTCTGTACAGGCCTTCAGGGAAGTTCTGCTGAAGAGTGTT 2298  OY 93 AspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyrAlaLeu 112  Db 2299 CCCTGCAAAGCTCAGAGAGTCCTTGGGAGAGATGATTCACTT 2358  OY 113 LeuArgThrSerValSerArgProCysSerCysThrHisGluHisAspTyrGluVal 131  Db 2359 CTACATATGCCTTCTACAGACCCAGGCATGCCCAGAAGATGAATTGAACTT 2418  OY 132 ValPheProHis 135  :::

```
Percent Similarity:
Best Local Similarity:
                                                                                                                    12819018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                        gene
                                                                                                       MEDLINE
PUBMED
                         AUTHORS
                                                                                                                                  REFERENCE
                                                                                                                                              AUTHORS
              REFERBNCE
                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                FEATURES
                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NIBINC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AY212246 3270 bp mRNA linear PRI 14-OCT-2003 Homo Bapiens germinal center B-cell expressed transcript 2 (GCET2) mRNA, complete cds.
                                                                                                                                                        /procein id="AAO21701.1"
/db_xref="G1:27733683"
/db_xref="G1:27733683"
/translation="MGNSLLAENRRQONTQEMPMNVRMQSPKQRTSRCWDHHIAEGCF
CLPWKKLIFERRADSQNRNERMSSTPIQDNVDQTYSEELCYTLINHRVLCTRPSGNS
AEEYVENVPCKAREPRESLGGTETEYSLLHMPSTDPRHARSPEDEYELLMPHRISSHF
LQQPRPLMAPSETQFSHL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      350 TCCCAAAAGGAAAATGAAAGAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  293 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                        MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                 173 ATGGGAATTCTCTGCTGAGAGAAAACAGGCGGCAGCAGCAGCACACTCAAGAGATGCCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63 GlyserGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
Campus Drive, CCSR building,
                                                                                                         /note="germinal center-associated lymphoma; contains modified ITAM motif, similar to mouse M17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerCys --- ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----bysLysGlyAsnProAspGluGluArgLysArg----
                                                                                                                                                                                                                                                                                    1654
47
33
54
21
5
                                                                                                                                                                                                                                                                                                   Matches:
Conservative:
 Stanford University, 269 Campus, Palo Alto, CA 94305-5151, USA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                           Mismatches:
Indels:
                                                                                                                                                                                                                                                                                      Length:
                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
173...709
                                                                                                                                                                                                                                                                                                                                                                                  x AF521911 (1-1654)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AY212246.1 GI:27948576
                                                                                                                                      codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                      4.16e-08
                                                                                                                                                                                                                                                                                                169.50
51.61%
30.32%
23.71%
                                        ...1654
                                                                                                                                                                                                                                                                                                                                                                                   US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
                   Room 1100,
     Medicine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AY212246
                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AY212246
LOCUS
                                                                                                  CDS
                                FEATURES
                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₹
                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
/codon start=1
/product=**germinal center B-cell expressed transcript 2"
/product=**germinal center B-cell expressed transcript 2"
/protein id=**AAO22147.1"
/db xref="G1:27948577"
/translation="%GNSLIRENRRQONTOEMPWNVRMQSPKQRTSRCWDHHIAEGGF
/translation=**MGNSLIRENRRQONTOEMPWNVRMQSPKQRTSRCWDHHIAEGGF
AEBYYENVCKAERPERSLGGTETEYSLLHWPSTDPRHARSPEDEYELLMPHRISSHF
LQQPRPLMAPSETQFSHL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                 Pan, Z., Shen, Y., Du, C., Zhou, G., McKeithan, T., Rosenwald, A., Staudt, L. and Chan, W.C.
Direct Submission
Submitted (07-JJN-2003) Pathology, University of Nebraska Medical Center, #42, Omaha, NE 68198, USA
Location/Qualifiers
l (bases 1 to 3270)
Pan, Z., Shen, Y., Du, C., Zhou, G., Rosenwald, A., Staudt, L.M.,
Greiner, T.C., McKeithan, T.W. and Chan, W.C.
Two newly characterized germinal center B-cell-associated genes,
GCET1 and GCET2, have differential expression in normal and
neoplastic B cells
Am. J. Pathol. 163 (1), 135-144 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="similar to Mus musculus germinal center transcri
M17; similar to MGC40441 sequence in GenBank Accession
Number BC030506"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         227 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 GlySerGluGluValCysTyrThrValileAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MetGlyAsnTyrLeuleuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                               Zhou, G., McKeithan, T., Rosenwald, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3270
447
333
54
51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (1-3270)
                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /map="3q13.13"
/cell_line="DHL16"
                                                                                                                                                                                                                                                                                                                                                                                                                                   chromosome="3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-005-907-2 (1-135) x AY212246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'gene="GCET2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="GCAT2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene="GCET2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.77e-08
169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                (bases 1 to 3270)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .3270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . .643
                                                                                                                                                                                                                                                                                                                                                       1, .3270
```

ω

TITLE

```
1654 bp mR. complete cds.
                                                                                                                                                                                                                                                                        Length:
Matches:
                                                   /db_xref="LocusID:257144"
/db_xref="MIM:607792"
                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-005-907-2 (1-135) x BC030506 (1-1532)
                                                                                                                                                                     LQQPRPLMAPSETQFSHL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens HGAL mRNA,
AF521911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AF521911.1 GI:27733682
                                                                                                                                                                                                                                                                3.82e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                       169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AF521911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12509382
                                                                                                                                                                                                                                          Scores:
                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                        Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AF521911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buecow, K.H., Scheefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Carinci, P., Frange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., Worfey, K.C., Hale, S., Garcia, A.M., Garcia, R., Richards, S.W., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, K., Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Geren, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A., Generation and intital analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: cgapbs remail.nih.gov
Tissue Procurement: Lou Staudt
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Control Maryland
Gaithersburg, Maryland Institutes of Health Intramural
Gaithersburg, Maryland: Control Maryland;
Web site: http://www.nisc.nih.gov/
Contact: nisc mgc@nhgri.nih.gov
Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,
Blakesley,R.W., Bouffard,G.G., Brech,K., Brinkley,C., Brooks,S.,
Blakesley,R.W., Granite,S., Guan,X., Gupta,J., Haghighi,P.,
Hansen,N. H., Granite,S. Guan,X., Gupta,J., Haghighi,P.,
Maduro,Q.L., Masiello,C., Maskeria,B., Mastrian,S.D.,McCloskey,J.C.,
Tsurgeon,C., Vogt,J.L., Walker,M.R., Wetherby,K.D., Wiggins,L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Thries: IRAK Plate: 64 Row: a Column: 15 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 22749536.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (07-MAY-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="germinal center expressed transcript 2"
/protein_id="AAH30506.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002) 12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="GCET2"
/note="Bynonyms: MCC4041, HGAL, GCAT2"
/db_xref="LocusID:257144"
/db_xref="MIM:607792"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MGC:40441 IMAGE:4385178"
/tissue_type="Lymph, lymphoma"
/clone lib="NHH MGC 85"
/lab_host="Ubertor: pCMV-SPORT6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Young, A., Zhang, L.-H. and Green, E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="GCET2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 1532)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . .1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REMARK
COMMENT
```

CDS

FEATURES

```
/translation="MGNSLLRENRROONTOEWPWNVEWGSPKORTSRCWDHHIABGCF
CLPWKKILIFEKRQDSQNENERMSSTPIQDNVDQTYSEELCYTLINHRVLCTRESGNS
AEEYYENVPCKAERPRESLGGTETEYSLLHMPSTDPRHARSPEDBYELLMPHRISSHF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryotz, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases I to 1654)
1 (bases I to 1654)
1 (bases I.S., Alizadeh, A.A., Rajapaksa, R., Tibshirani, R. and Levy, R. HGAL is a novel interleukin.4-inducible gene that strongly predicts survival in diffuse large B-cell lymphoma
Blood 101 (2), 433-440 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRI 14-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                  230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  411 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 174 GAAGGGTGTTTCTGCCTTCCATGGAAAAATACTCATTTTTGAAAAGAGG---CAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               231 TCCCAAAACQAAAATGAAAGAATGTCATCTCCCATCCAGGACAATGTTGACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63 GlySerGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               291 TACTCAGAGGAGCTGTGCTATACCCTCATCAATCATCGGGTTCTCTGTACAAGGCCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 (bases 1 to 1654)
Lossos,I.S., Alizadeh,A.A. and Levy,R.
Direct Submission
Submitted (16-JUN-2002) Division of Oncology, Department of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  471 CATGCCCGATCCCCAGAAGATGAAATTGAACTTCTCATGCCTCAC
                                                                                                                                                                           1532
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 ----LysLysGlyAsnProAspGluGluArgLysArg---
                                                                                                                                                                                                                            Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA
```

```
as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest. The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases: Em: EMBL; Sw: SWISSPROT; Tr:, TREMBL; Wp:, WORMPEP; Information on the WORMPEP database can be found at http://www.sanger.ac.uk/Projects/C elegans/wormpep This sequence was generated from part of bacterial clone contigs of human chromosome 1. constructed by the Sanger Centre Chromosome 1 Mapping Group. Further information can be found at http://www.sanger.ac.uk/HGP/Chr1
RPIL-978IIS is from the library PRCI-11:4 constructed by the group of Pieter de Jong. For further details see http://www.chori.org/bacpac/home.htm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         132080 caddaaaacdadaarddcadrdcrrcrdaadaacrdrcrrcrcrcrrrarrcacarc 132139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BC030506
Homo sapiens germinal center expressed transcript 2, mRNA (cDNA clone MGC:40441 IMAGE:4385178), complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1532)
Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96 ThrhighysValArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThrValIleAsnHisIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     76 ProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185467
80
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                          Center: Wellcome Trust Sanger Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Web site: http://www.sanger.ac.uk
Contact: humquery@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-005-907-2 (1-135) x AL606804 (1-185467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Homo sapiens'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone="RP11-978115"
/clone="RP11-978115"
/clone_lib="RPCI-11.4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="genomic_DN./db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                        - Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:20987805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.29e-33
430.00
100.00%
100.00%
60.14%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .185467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BC030506.1
MGC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BC030506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BC030506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lutert summission.

Submitted (16-007-2002) Wellcome Trust Sanger Institute, Hinxton, Cambridgeshire, CB10 15A, UK. E-mail enquiries:

Numquery@sanger.ac.uk

On Oct 24, 2002 this sequence version replaced gi:18121511.

During sequence assembly data is compared from overlapping clones.

Where differences are found these are annotated as variations together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences with only a small overlap as described above.

This sequence was finished as follows unless otherwise noted: all regions were either double-erranded or sequenced with an alternate chemistry or covered by high quality data (i.e., phred quality >=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AL606804 185467 bp DNA linear PRI 23-OCT-2002 Human DNA sequence from clone RP11-978115 on chromosome 1, complete sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5640 CCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGACTATGAGAACATTGACTCCCTC 5581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrarglysValargGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThr 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5580 ACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTTCTTAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76 ProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                           141268
80
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                          64946. .67606

/note="assembly_name:Contig3"
67707. .77674

/note="assembly_name:Contig4"
77775. .89256

/note="assembly_name:Contig6"
100501. .11915

/note="assembly_name:Contig6"
11016. .125713

/note="assembly_name:Contig6"
112016. .125713

/note="assembly_name:Contig9"
/note="assembly_name:Contig9"
/note="assembly_name:Contig9"
/note="assembly_name:Contig9"
/note="assembly_name:Contig9"
/note="assembly_name:Contig9"
/note="assembly_name:Contig9"
                           note="assembly_name:Contig2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-005-907-2 (1-135) x AC074365 (1-141268)
                                                                                                                                                                                                                                                                                                                                                                          vector side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AL606804.11 GI:24366459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 185467)
                                                                                                                                                                                                                                                                                                                                                          clone_end:SP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.44e-33
430.00
100.00%
100.00%
60.14%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Almeida,J.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                   misc_feature
                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                misc_feature
                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AL606804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
```

g

ò d ò g

ò

ઠે

132199

95

132259

```
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                         REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
                                                                                                                            AUTHORS
TITLE
                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5.- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB, annotation: HRI and RAB.
                                                                                                                                                                                                                                                                                                   /procein_id="Bac85873.1"
/bacein_id="194530325"
/db.xref="01:34530325"
/tanslation="MYMLEDSNSSTGCGARNCVECLVFLSVLGCQSERKGQMRTQQAG
RWLRAGREASSETHDEGTLILDFGSPELPLARGWQEHEPVVRCNVLPHAFSSWCFGG
NFPKWSETQELRNRVTVKRWEIISCENSGRK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC074365
Homo sapiens chromosome 1 clone RP11-115C4, WORKING DRAFT SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----AGGCAGGAATGACTACATTGAAAGAAACTT 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             678 recerchadetrearidardardecrarcadacarreacercercadaddaaaadridada 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGTTTAGAGAAAGGTCAGAAGACAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGGCCT 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGGAAATTATCTCCTGCGAAACTC------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tissue type="cerebellum"
|clone lib="BRACE3"
|note="cloning vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                        136. .537
/note="unnamed protein product"
                                                                                                                                    organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="BRACE3002390"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-005-907-2 (1-135) x AK124520 (1-4136)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 unordered pieces.
AC074365
AC074365. GI:10280935
HTG; HTGS PHASE1; HTGS_DRAFT.
Homo sapiens (human)
Homo sapiens
                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                       7.16e-51
581.00
85.19%
84.44%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
AC074365/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                   FEATURES
                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
```

```
Direct Submission
Submitted (29-JUL-2000) Genome Sequencing Center, Washington
University School of Medicine, 4444 Forest Park Parkway, St. Louis,
MO 63108, USA
Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sep 23, 2000 this sequence version replaced gi:9838075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOTE: This is a 'working draft' sequence. It currently consists of 10 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Center: Washington University Genome Sequencing Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1378: contig of 31377 bp in length 1378: contig of 31537 bp in length 1478: gap of unknown length 1478: gap of unknown length 1502 63011: gap of unknown length 1512 64845: contig of 1734 bp in length 1546 67606: contig of 1734 bp in length 1567 77674: gap of unknown length 1577 7774: gap of unknown length 15775 89256: contig of 19482 bp in length 1577 1774: gap of unknown length 1577 1775: gap of unknown length 1577 1776: contig of 114415 bp in length 1571 112015: gap of unknown length 15713: contig of 11415 bp in length 15714 125813: contig of 13688 bp in length 15718: contig of 13688 bp in length 1672713: contig of 15455 bp in length 1741268: contig of 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Quality coverage: 4.64 in Q20 bases; agarose-fp
Quality coverage: 4.81 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequencing vector: M13, 100%
Sequencing vector: M13, 100%
Sequencing vector: plasmid, 0%
Chemistry: Dye-primer ET; 100% of reads
Chemistry: Dye-terminator Big Dye; 0% of reads
Assembly program: Phrap; version 0.990319
Consensus quality: 138576 bases at least Q40
Consensus quality: 138356 bases at least Q20
Consensus quality: 139182 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note="assembly_name:Contig10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="assembly_name:Contig11"
63112. .64845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Insert size: 142000; agarose-fp
Insert size: 140368; sum-of-contigs
                                                                                                                                                         The sequence of Homo sapiens clone Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="genomic_DN/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="RP11-115C4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genome
                                     Mammalia, Eutheria, Pr
1 (bases 1 to 141268)
Waterston,R.H.
                                                                                                                                                                                                                                        2 (bases 1 to 141268)
Waterston, R.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Center code: WUGSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31478
63012
63112
64846
64946
67607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                112016
125714
125814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77675
77775
89257
89357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              111916
```

```
Isogai, T. and Yama
Direct Submission
                                                                                                             84.44%
                                                                                                                                                                US-10-005-907-2 (1-135)
                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
                                                               Scores:
                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                                          ..
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                             Alignment
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 8
AK124520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                     DRIGIN
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                          움
                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Isogai, T., Sugiyama, T., Otsuki, T., Wakamatsu, A., Sato, H., Ishii, S., Yamamoto, J., Isono, Y., Nagai, K. and Irie, R.
Full-Length human cdna
Patent: EP 1440981-A 129 28-JUL-2004;
Research Association for Biotechnology (JP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 02-AUG-2004
             and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 137 CAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                         40
HRI, and Biotechnology Center, National Institute of Technology Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: Reverse Proteomics Research Institute, HRI and RAB.
                                                                                                                                                                                                                                                                                                                                    1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                -----AGGCAGGAAATGACTTTGAAAGAAAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                           41 GlnAspGlnAspLysSerGlnGluValSerSerThrSerAsnGlnAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     497 gecagridentergaagaagrigecracacrigicarraarcacarcececarcagaaree
                                                                                                                                                                                                                                                                                                                                                                                         21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4032
1115
0
0
20
1
                                                                            1. .4032
/organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9606"
/clone="BRACE3074537"
/clone lib="BRACE31"
/clone lib="BRACE3"
/note="cloning vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                          377 AIGGGAAAIIAICICCIGCGAAAACIC-------
                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CQ841482 4136 bp | Seguence 129 from Patent EP1440981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4136 bp
                                                                                                                                                                                                                                                                                                               US-10-005-907-2 (1-135) x AK126682 (1-4032)
                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CQ841482
CQ841482.1 GI:50893269
                                                                                                                                                                                                                    3.37e-51
584.00
85.19%
85.19%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                              Similarity:
                                                                                                                                                                                                                                                 Percent Similarity:
                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                    104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                               Best Local
                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CQ841482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
                                                                  FEATURES
                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
```

/organism="Homo sapiens"

```
Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan (E-mall:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986) Whin cDh human cDhA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDhA full insert sequencing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ninomiya, K., Wagatsuma, M., Kanda, K., Kondo, H., Yokoi, T.,
Kodaira, H., Furuya, T., Takahashi, M., Kikkawa, E., Omura, Y., Abe, K.,
Kamihara, K., Katsuta, N., Sato, K., Tanikawa, M., Yamazaki, M.,
Sugiyama, T., Irie, R., Otsuki, T., Sato, H., Wakamatsu, A., Ishi, S.,
Xamamoto, J., Isono, Y., Kawai-Hio, Y., Sato, K., Mishikawa, T.,
Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M.,
Kikuchi, H., Murakawa, K., Kanehori, K., Takahashi-Fujii, A.,
Oshima, A., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S.,
NEDO human cDNA sequencing project
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          678 recercasercas de la contra de la recontra del la recontra de la recontra del la recontra de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     558 CAAGATCAAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerleuSerSerasnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4136 bp mRNA linear
Homo sapiens cDNA FLJ42529 fis, clone BRACE3002390.
AK124520
                                                                                                                                                                                                                                         4136
114
1
0
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AK124520.1 GI:34530324
oligo capping; fis (full insert sequence)
Homo sapiens (human)
                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          498 AIGGGAAAITAICTCCTGCGAAAACIC-----
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-4136)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 4136)
gai, T. and Yamamoto, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x CQ841482
                                                                                                                                                                                                                                                   7.16e-51
581.00
85.19%
```

100

737

677

80

557

40

617

09

120

q

8

셤

ò

```
Similarity:
                                                                    Percent Similarity:
                       Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                             330
                                                                                                  Query Match:
DB:
                                                                                  Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
AK126682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                          g
                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                             o mRNA linear PRI 19-MAY-2004 clone:QtrA-14007, full insert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hashimoto, K., Osada, N., Hida, M., Kusuda, J. and Sugano, S. Direct Submission
Submitted (27-APR-2001) Katsuyuki Hashimoto, National Institute of Infectious Diseases, Division of Genetic Resources; 23-1, Toyama (B-mail:khashi@nih.go.jp, URL:http://www.nih.go.jp/yoken/genebank/, Tel:81-3-5285-1111(ex.2120), Fax:81-3-5285-1181)
Lab host: TOP10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="hypochetical protein"
/protein_id="BAB46903.1"
/db_xref="GI:13874586"
/translation="MTTFERKLQDQDKKSKEVSSISNQENENGSGSEEVCYTVINHIP
HRRSSLSSNDDGYENIDSLTRKVREFRERSETEYALLRTSVSRPYSCTHEHDYEVVLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        299 TCCCTGAGCTCCAATGATGATGGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGA 358
                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae,
                                                                                                                                                                                                                                                                                                                                                                                Osada, N., Hida, M., Kusuda, J., Tanuma, R., Hirata, M., Hirai, M., Terao, K., Suzuki, Y., Sugano, S. and Hashimoto, K. Prediction of unidentified human genes on the basis of sequence similarity to novel EDNAs from cynomolgus monkey brain (er) Genome Biol. 3, research0006.1-0006.5 (2001)
                          were constructed by oligo-capping method (Sugano et al., , Institute of Medical Science, University of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="temporal lobe right"
/clone_lib="macaque brain cDNA library QtrA"
/dev_stage="adult"
                                                                                          CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                              oligo capping; fis (full insert sequence).
Macaca fascicularis (crab-eating macaque)
Macaca fascicularis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Macaca fascicularis"
|mol_type="mRNA"
|db_xref="taxon:9541"
|clone="QtrA-14007"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Custom primer used for sequencing (5' end primer [CTTCTGCTCTAAAAGCTGCG]; 3' end primer [CGACCTGCAGCTGCAGCACA]).
                                                                                                                                                                                           AB060908
Macaca fascicularis brain cDNA o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                       Cercopithecinae, Macaca.
                                                                                                                                                                                                                                       AB060908
AB060908.1 GI:13874585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /sex="male"
                                                                                                                                                                                         AB060908
                                                                                            121
                                                                                                                          419
                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                          RESULT 5
AB060908
                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
```

COMMENT

TITLE

FEATURES

```
Leogai, T. and Yamamoto, J.

Isogai, T. and Yamamoto, J.

Direct Submission

Bubmitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7

Kazusa-Kamateri, Kisarazu, Chiba 292-0818, Japan

(E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986)

NEDO human cDNA sequencing project supported by Ministry of

Economy, Trade and Industry of Japan; cDNA full insert sequencing:

Research Association for Biotechnology (RAB); cDNA library

construction: Helix Research Institute (HRI) (supported by Japan

Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRI 19-FEB-2004
                                                                                                                                                                                                                                                              87 AspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSer 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ninomiya, K., Wagatsuma, M., Kanda, K., Kondo, H., Yokoi, T., Kodaira, H., Furuya, T., Takahashi, M., Kikkawa, E., Omura, Y., Abe, K., Kamihara, K., Katsuta, N., Sato, K., Tanikawa, M., Yamazaki, M., Sugiyama, T., Irie, R., Osuki, T., Sato, H., Wakamatsu, A., Ishii, S., Yamamoto, J., Isono, Y., Kawai, Hio, Y., Sato, K., Nishikawa, T., Kiwura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M., Kikuchi, H., Murakawa, K., Kamahori, K., Takahashi Fujii, A., Oshima, A., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S., Nagahari, K., Masuho, Y., Nagai, K. and Isogai, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   107 GluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCysSerCysThrHisGlu 126
                                                                                                                                                                                                                                                                                                                                                46
                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                7 ArglysleuSerCysleuGlyGluAsnGlnLyslysProLyslysGlyAsnProAspGlu
                                                                                                                                                                                                                                                                                                                                     27 GluargiysargGlnGluMetThrThrPheGluargiysLeuGlnaspGlnaspLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                          47 SerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67 ValCysTyrThrValileAsnHisIleProHisGlnArgSerSerLeuSerSerAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens cDNA FLJ44728 fis, clone BRACE3024537.
AK126682.1 GI:34533254
Oligo capping; fis (full insert sequence).
Homo sapiens (human)
1924
120
                                                   Conservative:
Mismatches:
Indels:
                                Matches:
     Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     127 HisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         530 CATGATTACGAGTTGTGCTTCCACAC 556
                                                                                                                                   Gaps:
                                                                                                                                                                               US-10-005-907-2 (1-135) x AB060908 (1-1924)
                     634.00
96.128
93.028
88.678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished
```

DEFINITION

RESULT 3 CQ842314 LOCUS

g

ACCESSION VERSION KEYWORDS

ORGANISM

SOURCE

JOURNAL

TITLE

FEATURES

AUTHORS REFERENCE

```
Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan (E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986) NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; CDNA full insert sequencing: Research Association for Biotechnology (RAB); CDNA full insert sequencing: Research Association for Biotechnology (RAB); CDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5-6. & 3-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: HRI and RAB.
                                                                                   Suzuki,O., Sasaki,N., Aotsuka,S., Shoji,T., Ichihara,T.,
Shiohata,N., Matsumoto,K., Hirano,M., Sano,S., Nomura,R.,
Yoshikawa,Y., Matsumura,Y., Moriya,S., Chiba,E., Momiyama,H.,
Onogawa,S., Kaetiyama,S., Satoh,N., Matsunawa,H., Takahashi,E.,
Kataoka,R., Kuga,N., Kuroda,A., Satoh,I., Kanata,K., Takami,S.,
Terashima,Y., Watanabe,M., Sugiyama,T., Irie,R., Otsuki,T.,
Sato,H., Wakamura,Y., Sekine,M., Kimura,K., Yamashita,H.,
Matsuo,K., Nakamura,Y., Sekine,M., Kikuchi,H., Kanda,K.,
Wagatsuma,M., Murakawa,K., Kanehori,K., Takahashi-Pujii,A.,
Oshima,A., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S.,
Nagahari,K., Masuho,Y., Nagai,K. and Isogai,T.
I Unpublished
                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81 SerleuSerSerAsnAspAspGlyTyrGluAsnIleAspSerleuThrArgLysValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mrNa"
/db xref="taxon:9606"
/db xref="taxon:9606"
/tissue_type="ovary"
/clone_lib="novArx2"
/dev_stage="adult"
/note="cloning vector: pME188FL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-005-907-2 (1-135) x AK123798 (1-1709)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                          Isogai, T. and Yamamoto, J. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.12e-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    711.00
100.00%
99.26%
99.44%
                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 1709)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                             Isogai,T., Sugiyama,T., Otsuki,T., Wakamatsu,A., Sato,H., Ishii,S., Yamamoto,J., Isono,Y., Nagai,K. and Irie,R.
Full-length human cdna
Patent: EP 1440981-A 961 28-JUL-2004;
Research Association for Biotechnology (JP)
                                                                                                                             PAT 02-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239 GCCAGTGGTTCTGAAGAGTGTGCTACACTGTCATTAATCACATCCCCCATCAGAGATCC 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGITIAGAGAAAGGICAGAGACAGAATAIGCCCIICIIAGGACIICIGIIAGIAGGCCI 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            recercasecrecaricarcaridaciaridadaacarridacreecreacaaggaaagregaa 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                         Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41 GinAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA linear clone NOVAR2000710.
  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1709
134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AK123798

Homo sapiens CDNA FLJ41804 fis, clone NOVA AK123798

AK123798.1

GI:34529425

oligo capping; fis (full insert sequence).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches:
Indels:
                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .1709
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                              Sequence 961 from Patent BP1440981.
CQ842314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-005-907-2 (1-135) x CQ842314 (1-1709)
                                                                                                                                                                                         CQ842314.1 GI:50894101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.12e-65
711.00
100.00%
99.26%
                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                CQ842314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
```

. No. .

Score:

ద

 $\stackrel{\diamond}{\circ}$ 임 à

ò

q

유 ਨੇ 임 à g ð

ઠ

ORIGIN

100

DEFINITION ACCESSION VERSION KEYWORDS

RESULT 4 AK123798

298

80

238

118

40

178

N

```
/procein_id="Cad48808.1"
/db_xref="G1:23386430"
/db_xref="G1:23386430"
Kranslat_ion="MGNYLEKLSCLGENQKKPKKGNPDEERKRQEMTTFERKLQDQD
KKQGEVSTSNQENSHOGSGEEVCYTVINH_PHQRSSLSSNDDGYENIDSLTRKVRQF
RERSETEYALLRTSVSRPCSCTHEHDYEVVFPH"
                                                                                                                                                                    PAT 27-SEP-2002
                              407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
        Nocka, K., Pirozzi, G. and Einstein, R.
Novel genes associated with allergic hypersensitivity and mast
activation
Patent: W0 0246389-A 1 13-JUN-2002;
UCB, S.A. (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           205 GGCAGTGGTTCTGAAGAGTGTGCTACACTGTCATTAATCACATCCCCATCAGAGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 265 TCCTGAGCTCCAATGATGATGAGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAGAAGCCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 iysçlyasıproaspçludluargiysargçlınglumetThrThrPheGluArgiysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlySerGlySerGluGluValCysTyrThrValIleAsnHisIlePrOHisGlnArgSer
                                                               135
                                                                                               452
                                                                                                                                                                 linear
                                                          3762
135
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25. 7.432
/note="unnamed protein product"
                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .3762
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                             AX505122 3762 bp
Sequence 1 from Patent WO0246389.
AX505122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1-3762)
                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                               AX505122.1 GI:23386429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-005-907-2 (1-135) x AX505122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.52e-65
715.00
100.00%
100.00%
                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                          348
                                                            121
                                                                                            408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . No.:
                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                            RESULT 2
AX505122
                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                      셤
                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                           Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 32 Row: b Column: 10

This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21687148.
                                                                                                                                                                                                                                                                                                                                                                                                                                     found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aredeaharrarcrecedeahaacreacreceredeahaaharahaahacceaha 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGAAAACGAGAAT 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                   Strausberg, R. Direct Submission
Direct Submission
Submitted (19-FEB-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2022)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acute myelogenous leukemia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysGlyAssnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                  WITH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Parayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Brin Helton, Mark Ketteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2648
135
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tissue type="Bone marrow,
/clone_lib="NIH MGC_55"
/lab_host="DH10B"
/note="Vector: pDNR-LIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .2648
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:9606"
/clone="IMAGE:4109064"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x BC024174 (1-2648)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.76e-65
715.00
100.00%
100.00%
                                                                                                    (bases 1 to 2648)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                     12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                      TITLE
JOURNAL
                                                                                     PUBMED
REFERENCE
                                                                                                                    AUTHORS
                                                                   JOURNAL
                                                                                                                                                                                                                      REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
```

CC

à

ð

D Q

Db

à

ò

g

ઠે g à

```
November 18, 2004, 21:31:29; Search time 3546 Seconds (without alignments) 1800.369 Million cell updates/sec
                                                                                                                                                                                                                                                           1 MGNYLLRKLSCLGENQKKPK......SVSRPCSCTHEHDYEVVFPH 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9053458
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                   using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                       4526729 segs, 23644849745 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                        Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                  US-10-005-907-2
715
                                                                                     OM protein - nucleic search,
                                                                                                                                                                                                                                                                                                        BLOSUM62
                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                     Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		lon	BC024174 Homo sapi	AX505122 Sequence	Sequence	Homo sapi
		Description	BC024174	AX505122	CQ842314	AK123798
SUMMARIES		ΙD	BC024174	AX505122	CQ842314	AK123798
		В	6	9	9	6
		Match Length DB ID	1	3762	1709	1709
	* Query		100.0	100.0	99.4	99.4
		Score	715	715	711	711
	Result	No.		71	٣	4

AB060908 Macaca fa AK126682 Homo sapi	2 Segue	0	Homo		BC030506 Homo sapi			Segue		AY500830 Mus muscu	Mus m	Homo	AC128688 Homo sapi	AC024964 Homo sapi	AC110870 Homo sapi	9		0 Mus		AC139696 Homo sapi	AL954353 Mouse DNA	AC147571 Pan trogl	AL626775 Mouse DNA			_	Leishman	-	95 hr	_	8 Plasn	4 Homo	Homo	AC004709 Plasmodiu	AE014847 Plasmodiu	AC120746 Rattus no	AC108226 Rattus no	AL837509 Mouse DNA	2	`
AB060908 AK126682			AC074	AL606				CO733169			MMC	AK12552		AC024964						AC139696		AC147571		AL713872	AC068147	AC005801	AC009603	AC121231	BD136402	AC092331	AC004688	AC116364	AC069163	AC004709	AE014847	AC120746	AC108226	0 AL837509	07101104	n
9 9	, w	6	7	σ	σ	σ	σ	v	9	10	10	σ	σ	0	~	٣	0	0	7	~	10	7	10	~	7	e	٣	ო	9	თ	~	σ	~	8		C	10		, ,	7
1924	13	4136	14	18							1672		w	203405	N	86826	212287	184705	188119	78001	188920	171079	190641	286358	139117	34984	35573	108797	1892	162153	169794	18888	18	1961	25265	ומ	24434	1566	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1/534
88.7		31.3	50.1	50.1	33.7	33.7	7.23	33.3	22.2	17.9	17.9	17.6	17.6	17.6	17.6	15.7	15.5	15.3	15.3	14.6	14.3	14.3	14.0	14.0	13.9	13.8	13.8	13.8	13.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.5	, ,	13.5
4.4			30	30	69.5	69.5	5.69		159				10	10	10	~	10.5	2.60	5.60	104.5	02.5	1				98.5	98.5	98.5	O	'n.	7.5	7.5		7.5		. 6	. 6	` v		ō
S	, ,	œ	σ	10	: ::	12	[ =	1 7	1 4	16	17	18	13	20	21	22	23	24	25	56	27	28	29	30		32	33	34	35	36	37	38	36	4	41	4.5	4.5	44	, ,	40
			υ									υ									ť	>			ť	U	ט	บ				U	C	)						

## ALIGNMENTS

```
384 AAAAAATACTCATTTTGAAAAGAGG---CAAGATTCCCAAAACGAAAATGAAAGAATG 440
                                                                                                                                                         90 GludsnileAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                     110 TyrhlaLeuLeuArgThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                                                                          31 GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal 50
          876
37
28
39
3
          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                            Search completed: November 19, 2004, 03:36:44 Job time : 2710 secs
                                                                  US-10-005-907-2 (1-135) x BQ214406 (1-876)
                                                                                                                                                                                                                                                                129 TyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                            |||||||::::::
TATGAACTICTCATGCCTCAC 701
       1.11e-07
156.50
60.75%
34.58%
21.89%
                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
Alignment Scores:
Pred. No.:
                 Score:
                                                                                      ò
                                                                                                   a
                                                                                                                      à
                                                                                                                                   g
                                                                                                                                                     8 8
                                                                                                                                                                                           $ B $
                                                                                                                                                                                                                                           음
장
음
```

233

83

20

```
| 1. 876 | Arganisms | Arganis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BQ214406 876 bp mRNA linear BST 02-MAY-2002 AGENCOURT 7592611 NIH_MGC_92 Homo sapiens cDNA clone IMAGE:6070069 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90 GluAsnIleAspSerLeuThrArgLysValArqGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       110 TyralaleuleuargThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 294 TATTCACTÍCTÁCATATGCCTTCTACAGACCCCAGGCATGCCCGATCCCCAGAAGATGAA 353
                                                                                                                                                                                                                                                                                                                           Eukarockers, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 876)
NIH-MGC http://wgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                              ||||||||:::
234 GAGATGTTCCCTGCAAAGCTGAAAGACCCAGAGAGTCCTTGGGAGGAACTGAGACTGAG
                                                                                                                                                                                                          GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                            71 ValileAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGlYTYr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Tissue Procurement: ATCC
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arganion: Life Technologies, Inc.
CDNA Library Arganion: Life Technologies, Inc.
CDNA Library Arganion: WGC Clone distribution
Clone distribution: WGC clone distribution information
Clone distribution: WGC clone distribution
Clone distribution
Clone distrib
3338
Conservative:
Mismatches:
Indels:
                                                                                                                                                    US-10-005-907-2 (1-135) x AW963366 (1-683)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        129 TyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||||||::::: |||||||
354 TATGAACTTCTCATGCCTCAC 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BQ214406.1 GI:20395806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
60.75%
34.58%
21.89%
         Percent Similarity:
Best Local Similarity:
      Similarity:
                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BQ214406
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AW963366 683 bp mRNA linear EST 01-JUN-2000 EST1375439 MAGE resequences, MAGH Homo sapiens CDNA, mRNA sequence. AW963366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90 GluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110 TyrAlaLeuLeuArgThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233 CTCATCAATCATCGGGTTCTCTGTACAAGGCCATCAGGGAACTCTGCTGAAGAGTACTAT 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi; Mammalia, Eutheria, Primates; Catarrhini, Hominidae, Homo. I (bases 1 to 683)
Hegde, P., Qi, K., Abernathy, K., Dharap, S., Gaspard, R., Gay, C., Holt, I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray Unpublished (2000)

Unpublished (2000)

The Institute for Genomic Research 9712 Medical Center Dr., Rockville, MD 20850, USA Fax: 301 838 3528

Fax: 301 838 0208

Email: johnq@tigr.org

Plate: 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerSerThrSerAsnGluAsnGluAsnGluAsnGlySerGluGluValCysTyrThr
                                                                                                                                                                                                                                                                                                                                                        GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71 ValileAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGlYTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   683
                                                                             508
37
39
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAGH"
                                                                             Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA" | db_xref="teson:966" | db_xref="teson:966" | dclone lib="MAGE resequences, /note="Vector: pBluescriptSKm"
                                                                                                                                                                          Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x AY404586 (1-508)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            413 TATGAACTTCTCATGCCTCAC 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AW963366.1 GI:8153202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8.08e-08
156.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seq primer: Reverse
                                                                                   51e-08
                                                                                                             156.50
60.75%
34.58%
21.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Quackenbush, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ношо
                                                         Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
AW963366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                        ઠે
```

рę

α

g ò d ò d ò d ò 셤

g ò

ð

```
6.55e-08
159.50
60.75%
34.58%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AY404586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14671302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GSS.
                                                                                                                                                                                                                                                                                                                                                                           90
                                                                                                                                                                                                                                                                                                                                                                                                            616
                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AY404586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                 à
                                                                                                                                                                                            g
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
E 1 (bases I to 1085)
S NHH-MGC http://mgc.nci.nih.gov/
NHT-MGC http://mgc.nci.nih.gov/
L Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lou Staudt
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be http://image.llnl.gov.d.E. Consortium/LLNL at:
Plate: LLAM12135 row: d column: 24
High quality Sequence start: 19
High quality Sequence stop: 760.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM455407

1085 bp mRNA linear EST 05-FEB-2002

ABENCOURT 6407334 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:5500391
                                                                                                                                                                                                                           100 ArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                     ||||
| 125 CCTTGGAATGTGAGAATGCAAAAGCCCCAAAAGAAGAACATCCAGATGCTGGGATCACAT 184
                                                                                                                                                         362 CCATCAGGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCC 421
                                                                                                                                                                                                                                                                                                                                                                 9
                                                                      ---GlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                79
                                                                                                                                                                                                                                                                        80 SerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /close="IMAGES:55039]"
/Lissue type="lymphoma, cell line"
/lab_host="DH10B (phage-resistant)"
/clone=lib="NHH MGC 85"
/incte="Organ: lymph, Vector: pCWV-SPORT6; Site_1: Not!;
Site_2: Sall; Cloned unidirectionally, oligo-dT primed.
Average insert size 1.867 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                 185 ATCGCTGAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---
                                                                                                                                    GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                     GlySerGlySerGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                              120 ProCysSerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                     -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BM455407.1 GI:18504436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5', mRNA sequence.
BM455407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                  31
                                                                                                                                    41
                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                  482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
BM455407
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
```

Alignment Scores:

```
GSS 16-DEC-2003
                                                                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                                                                                                                GluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         110 TyralaleuleuargThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             676 TATTCACTTCTACATATGCCTTCTACAGACCCCAGGCATGCCCGAGAGATGAA 735
                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                71 ValileAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyr 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 508)

Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.

Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                  Clark.A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Clark.A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wango,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M.
Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
Location/Qualifiers
                                                                                                                                                                                                        31 GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                    51 SerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     508 bp DNA linear GSS 16-DEC VIRTUAL TRANSCRIPT, partial sequence,
  1085
37
28
39
3
Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene trios
Science 302 (5652), 1960-1963 (2003)
                                                                                                Indels:
                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                   (1-1085)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <1. ...>508
/gene="GCET2"
/locus_tag="HCM1940"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      129 TyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||||||||
TATGAACTICTCATGCCTCAC 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens GCET2 gene,
                                                                                                                                                         US-10-005-907-2 (1-135) x BM455407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     genomic survey sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AY404586
AY404586.1 GI:39760563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
```

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Butheeia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1193)

2 NIH-MGC http://mgc.nci.nih.gov/.

8 NIH-MGC http://mgc.nci.nih.gov/.

1 Unpublished (1999)

3 Contact: Robert Strausberg, Ph.D.

Bmail: cgapbs-r@mail.nih.gov

Tissue Procurement: Lou Staudt
cDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAMM2134 row: j column: 14

High quality sequence stop: 592.

1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1193 bp mRNA linear EST 05-FEB-2002 AGENCOURT 6405645 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:5500141 5', mRNA Sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGlu-----AsnGlnLysLys 18
                                                                                                                                                                                                                                                            /Library programme, cell line"
/lab host="lymphome, cell line"
/lab host="lymphome, cell line"
/clone lib="NIH MGC_88"
/note="Grgan: lymph; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
  79
                                                                                                              SerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal
                                                                                                                                                                                                                            100 ArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg
61 GlySerGlySerGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArg
                                                                                                                                                                                                                                                                                                                                        120 ProCysSerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                        1193
48
34
52
23
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .1193
//organiam="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5500141"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-005-907-2 (1-135) x BM455198 (1-1193)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM455198.1 GI:18504238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       166.50
52.23%
30.57%
23.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scores:
                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
BM455198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                               à
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                     Namalia; Butheria; Craniata; Vertebrata; Buteleostomi; Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Bukaryota; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1070)

1 (bases) 1 to 1070)

2 NH-MGC http://mgc.nci.nlh.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Lou Staudt

CONTACT: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Lou Staudt

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiNL at:

http://image.llnl.gov

Plate: LiAM12124 row: h column: 22

High quality sequence stop: 648.

1.0070

Lication/Qualifiers

Irce

Lication/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         / Organism = 100m organism | April | A
                                                                                                                                              AGENCOURT 6409034 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:54962615', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGlu-----AsnGlnLysLys 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ------GlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120 ProCysSerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                    |||| :::|||||||:
528 CCCAGGCATGCCCAGAAGATGAATGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pro------LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-005-907-2 (1-135) x BM456595 (1-1070)
                                                                                                                                                                                                                                                                                                             BM456595.1 GI:18505635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.76e-09
166.50
52.23%
30.57%
23.29%
                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    No.:
                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                              RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                        BM456595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

```
Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                     source
                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठ
                                                                      Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : Begref@genoscope.cns.fr
- Web : www.genoscope.cns.fr)
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1000 bp mRNA linear EST 12-MAR-2002
-6692745 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:5499556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  115 Ariegdabarrcricriecreadagababacaggcggcagcagabacacricaagagargcirrgg 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            175 AATGTGAGAATGCAAAGCCCCCAAAACAGAACATCCAGAATGCTGGGATCACCATATCGCT 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              235 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                292 TCCCAAAACGAAAATGAAAGAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     412 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        472 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG 531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63 GlySerGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  532 CATGCCCGATCCCCCAGAAGATGAAATTGAAACTTCTCATGCCTCAC 576
                                                                                                                                                                                                                                         /mol type="mkNa"
/db xref="taxon;9606"
/db xref="taxon;9607yD15"
/tissue type="B cells (Ramos cell line)"
/plasmid="pcMVSPORT_6"
                                                                                                                                                                                                                                                                                                                                                                     1566
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----LysLysGlyAsnProAspGluGluArgLysArg-
                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                               organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-1566)
                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGENCOURT 6692745 NIH_MG
5', mRNA Bequence.
BM904106
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-005-907-2 (1-135) x CR625820
                                                                                                                                                                                                                                                                                                                                                                 7.12e-09
169.50
51.61%
30.32%
23.71%
                    Faraday Avenue
2 (bases 1 to 1566)
                                                               Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31 -----
                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                             Genoscope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BM904106
                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
                                             AUTHORS
                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                 FEATURES
                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BM904106
                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     슝
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
```

```
/USGULIANE INCHEO SORFERD
/WOL LYPE="MRRN"
/db_Xref="taxon:9606"
/dlone="NAGE:5499556"
/clone="NAGE:5499556"
/tissue_1ype="lymphone", cell line"
/lab host="DH108" (phage-resistant)"
/clone lib="NIH_MGC_85"
/clone lib="NIH_MGC_85"
/noce="longan: lymph; Vector: pcMV-SPORT6; Site l: Not1;
Site 2: Sall; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                        230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ||||||||
288 CAAGATTCCCAAAACGAAATGAAGAATGTCATCTACTCCCATCCAGGACAATGTTGAC 347
                    Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       231 ATCGCTGAAGGGTGTTTCTGCCTTCCATGGAAAAAAAAATACTCATTTTTGAAAAGAGG--- 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGlu-----AsnGlnLysLys 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    171 CCTTGGAATGTGAGAATGCAAAGCCCCAAACAGAGAACATCCAGATGCTGGGATCACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||| :::||| :::||| :::::: ||||||||||||:::
408 CCATCAGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100 ArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 GlySerGlySerGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArg
               Sukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pro------bysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1000
48
34
52
23
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x BM904106 (1-1000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.95e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    166.50
52.23%
30.57%
23.29%
sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
```

```
Best Local Similarity:
                                                                                                                                                                                                Percent Similarity
                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                          31
                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
CR625820
                                                                                                                                ORIGIN
                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

I (bases) 1 to 1124)

S NIH-MGC http://mgc.nci.nih.gov/.

I Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: Louis Staudt, M.D., Ph.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Close distribution: MGC close distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1124 bp mRNA linear EST 12-JAN-2001
Homo sapiens cDNA clone IMAGE:4342719 5',
                                                                                                                                                                                                                                                                                                                                                                                                                              340 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100 TCCTIGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG 459
                                                                                                                                                                                                                                                                                                                                                                       82 LeuSerserAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLy8ValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                         43 ATGGGAAATTCTCTGCTGAGAGAAAACAGGGGGGGGGAGCAGCAGCACACTCAAGAGATGCCTTGG 102
                                                                                                                                                                                                                162
                                                                                                                                                                                                                                                                     219
                                                                                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                           42
                                                                                                                                 19
                                                                                                                                                                                                         163 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT
                                                                                                                                                                                                                                                                                                                 220 TCCCAAAAGAAAAGAAAGATGTCATCTCCCATCCAGGACAATGTTGACCAGACC
                                                                                                                                                                                                                                                                                                                                                      63 GlySerGluGluValCysTyrThrValileAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                               43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                           ------GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        460 CAIGCCCGAICCCCAGAAGAIGAATAIGAACTICTCAIGCCTCAC 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             found through the I.M.A.G.B. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAM9958 row: h column: 16
High quality sequence stop: 715.
        1095
47
33
54
21
5
                                                                                                                                                                                      20 -----LysLysGlyAsnProAspGluGluArgLysArg--
        Length:
Matches:
Conservative:
Mismatches:
                                                                  Indels:
                                                                               Gaps:
                                                                                                         x BG106563 (1-1095)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.49e-09
169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                         US-10-005-907-2 (1-135)
                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF795688
 Scores:
                                                                                                                                                                                                                                                 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
               .. No. .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
BF795688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                 q
                                                                                                                                                                                            ઠે
                                                                                                                                       ò
```

```
Homo sapiens (human).

CR655820.

CR655820.

CR655820.

GI:50506627

HTC; CNSJT CDNA.

Homo sapiens (human)

SM Homo sapiens (human)

SM Homo sapiens

Eukaryota, Metazoa; Chordata, Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 1566)

S lii, Was. Gruber.C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

L Unpublished

Contact : Feng Liang Email : fliang@lifetech.com URL :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CR625820 1566 bp mRNA linear HTC 21-JUL-2004 full-length cDNA clone CS0DG007YD15 of B cells (Ramos cell line) of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               178 AAIGIGAGAAIGCAAAGCĊĊĊAAACAGAGAACAICCÄĠAIGCIGGGAICACCAIAICGCI 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  42
                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                   /tissue_type="lymphoma, cell line"
/lab.host="DH10B (phage-resistant)"
/clone lib="NIH_MGC_85"
/shore="lorgan: lymph; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally; oligo-dT primed.
Average insert size 1:867 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ::::::: |||||||
238 GAAGGTGTTTCTGCCTTCCATGGAAAAAAAAATACTCATTTTGAAAAGAGG---CAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ------GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              535 CATGCCCGAICCCCAGAGGAIGAATATGAACTICTCAIGCCTCAC 579
                                                                                                                                                                                                                                                                          1124
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 -----LysLysGlyAsnProAspGluGluArgLysArg-
                                                                                                                                                                                                                                                                                                                 Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                            Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                   (1-1124)
                                     /clone="IMAGE:4342719"
[_type="mRNA"
xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x BF795688
                                                                                                                                                                                                                                                                              4.64e-09
169.50
51.61%
30.32%
23.71%
```

42

81

ద ò 임 ò d ઠ g ò

```
Homo sapiens

Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

En (bases 1 to 1095)

NH-MGC http://mgc.nci.nih.gov/.

NH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Emmali cgapbar*Cammali.nih.gov

Tissue Procurement: Louis Staudt, M.D., Ph.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

http://image.lln.gov

Plate: LLAMN066 row: a column: 19
                                                      81 AridGGAAATTCTCTGCTGAGAAAAAAAAGGCGGCAGCAGAACACTCAAGAGAGATGCCTTGG 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BG106563 1095 bp mRNA linear EST 30-JAN-2001
602290373F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:4385178 5',
                                                                                                                                         141 AATGTGAGAATGCAAAAGCCCCAAACAACATCCAGATGCTGGGATCACCATATCGCT 200
                                                                                                                                                                                                               201 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 257
                                                                                                                                                                                                                                                                                                  258 TCCCAAAACGAAAATGAAGAAGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         378 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCCAGAGAG 437
                                                                                                                                                                                                                                                                                                                                                                                      318 TACTCAGAGGAGCTGTGCTATACCTCATCAATCATCGGGTTCTCTGTACAAGGCCATCA 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="lymphoms, cell line"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH MGC_08"
/note="Grgan: Lymph; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally; oligo-dT primed.
Average insert size_1:867 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                  31 -------GlnGluMetThrThrPheGluArgLysLeuGlnAsp
               MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                           63 GlyserGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                -----LysLysGlyAsnProAspGluGluArgLysArg------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATGCCCGATCCCCAGAAGATGAATATGAACTTCTCATGCCTCAC 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            High quality sequence stop: 641.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'clone="IMAGE:4385178"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BG106563
BG106563.1 GI:12600409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA sequence.
                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BG106563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                             셤
                                                                                                                                    셤
                                                                                     ò
                                                                                                                                                                                    ò
                                                                                                                                                                                                                        Op
                                                                                                                                                                                                                                                                     ठे
                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BM479887
AGENCOURT_6464830 NIH_MGC_92 Homo sapiens cDNA clone IMAGE:5577364
                             273 TCCCAAAAACGAAAATGAAAAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 332
                                                                                                                                                                    82 LeuSerSerAsnAspAspGlyTYrGluAsnIleAspSerLeuThrArgLysValArgGln 101
43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (bases 1 to 1039)

NIH-WGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                          102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys
                                                                                                                                                                                                                                                                                     453 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCAGG
                                                                                   63 GlySerGluGluValCysTyrThrValileAsnHis---IleProHisGlnArgSerSer
                                                                                                         cDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LiAM12330 row: 1 column: 05
High quality sequence stop: 665.
                                                                                                                                                                                                                                                                                                                                             SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                          513 CATGCCCGATCCCCAGAAGATGAAATATGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1039
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      x BM479887 (1-1039)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BM479887.1 GI:18528929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.19e-09
169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . .1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
DB:
```

ACCESSION VERSION

RESULT 5 BM479887

ORGANISM

KEYWORDS SOURCE

REFERENCE

JOURNAL COMMENT AUTHORS TITLE

source

FEATURES

No.:

Score:

DRIGIN

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (Dases 1 to 924)

NIH-MGC http://mgc.nci.nih.gov/.

L Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: MRC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Clone distribution: MRC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

High quality sequence stop: 726.

High quality sequence stop: 726.
                                                                                                                                                                                      BG389415
602414106F1 NIH_MGC_92 Homo sapiens cDNA clone IMAGE:4522512 5',
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96 Aridddaaahrrcrchdchdadaaaacaggggggggggagaagacacrcaagaargcchrgg 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  216 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue type="embryonal carcinoma, cell line"
/lab_host="DHIOB (phage-resistant)"
/clone lib="NHIOB (pc. 92"
/clone lib="NHE MGC 92"
/note="Organ: testis; Vector: pcMV-SPORT6; Site_1: Not1; Site_2: Sall; Cloned unidirectionally; oligo-dT primed. Average insert size 2.5 Kb Library enriched for full-length clones and constructed by Life Technologies. Note: this is a NIH_MGC Library."
102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                   SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                 924
47
33
54
51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----LysLysGlyAsnProAspGluGluArgLysArg-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4522512"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-005-907-2 (1-135) x BG389415
                                                                                                                                                                                                                                                                        BG389415.1 GI:13282861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.6e-09
169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .924
                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
                                                                                                                                                                                                                                                      BG389415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
No.:
                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                              BG389415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DRIGIN
                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                             엄
                                                                                    ò
                                                                                                                       g
                                                                                                                       /organism="Homo sapiens"
//organism="MRNA"
//ob_Trype="mRNA"
//db_Aref="haxon:9606"
//clone="CSEGGOTYDIS"
//tissue_type="B_CELLS (RAMOS CELL LINE)"
//tissue_type="B_CELLS (RAMOS CELL LINE)"
//clone_lib="Homo sapiens B_CELLS (RAMOS CELL LINE)"
//clone_lib="Weator: pCMVSPORT 6; lst strand cDNA was primed
//note="Vector: pCMVSPORT 6; lst strand cDNA was primed
//note="Vector: pCMVSPORT 6; lst strand cDNA was primed
//note="vector: pCMVSPORT 6; lst strand cloned
//oble=strand cDNA was digested with Not I and cloned
the Not I and EcoRV sites of the pCMVSPORT 6 vector.
Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuSerserAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           292 TCCCAAAAAGAAAATGAAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           115 ATGGGAAATTCTCTGCTGAGAAAACAGGCGGCAGCAGAACACTCAAGAGATGCCTTGG 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro--- 19
                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      175 AATGTGAGAATGCAAAAGCCCCAAACAGAACATCCAGATGCTGGGATCACCATATCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          was not normalized. Library was constructed by according division of Invitrogen.
This sequence belongs to sequence cluster 1964.r
For more information about this cluster, see http://www.genosope.ons.fr/cdna?g=CSODG007CB08QP1&c=1964.r.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     917
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  [ndels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (1-917)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x AL560376
                 GI:46185747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.57e-09
169.50
51.61%
30.32%
23.71%
                                                    sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .917
                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                          ORGANISM
                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DRIGIN
                                                        SOURCE
```

30

19

q

ద ઠે

ò 셤 ò g ጵ 셤

ò

N

```
EST 02-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            280 TCCCAAAACAAAAATGAAAAAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGGAAATTCTCTGCTGAGAGAAACAGGCGGCAGCAGAGAACACTCAAGAGATGCCTTGG 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           340 TACTCAGAGGAGCTGTGCTATACCTCATCAATCATCGGGTTCTCTGTACAAGGCCATCA 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .02 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                             /tissue_type="lymphona, cell line"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NHH_MGC_85"
/note="Grgan: lymph, Vector: pCMV-SPORT6; Site 1: Not!;
Site_2: Sall; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for full-length clones and constructed by Life Technologies.
Note: this is a NH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AL560376

917 bp mRNA linear EST 02-APR-200
AL560376 Homo sapiens B CELLS (RAMOS CELL LINE) Homo sapiens cDNA
clone CSODG007XD15 5-PRIME, mRNA sequence.
AL560376
                                                                                                         þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63 GlySerGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
               Tissue Procurement: Louis Staudt, M.D., Ph.D. cDNA Library Preparation: Life Technologies, Inc. cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov http://image.llnl.gov d column: 20 High quality sequence stop: 687. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       520 CATGCCCGATCCCCAGAAGATGAAATATGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1045
48
32
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----LysLysGlyAsnProAspGluGluArgLysArg-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                 1. .1045
/organism="Homo_sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4340323"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-005-907-2 (1-135) x BF797507 (1-1045)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.44e-09
173.50
51.61%
30.97%
24.27%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
AL560376
                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
/tissue_type="from acute myelogenous leukemia"
/lab host="M100 (T1 phage-resistant)"
/lab host="M100 (T1 phage-resistant)"
/lone=lib="NIH_MGC_55"
/noce="Organ: bone marrow, Vector: pDNR-LIB (Clontech);
Site_1: Sfil (ggccgcctcggcc); Site_2: Sfil
(ggccattatggcc); Double-stranded cDNa was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 5'-ATTCTACAGGCCGACGACATG-4T(30)BN-3' (where B = A, C, of and N = A, C, G, or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies concained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                602257174F1 NIH_MGC_85 Homo Bapiens cDNA linear EST 12-JAN-2001
mRNA sequence.
BF797507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      105 AAAGGAAACCCAGATGAGGAAAGAAACGGCAGGAAATGACTACATTTGAAAAGAAACTT 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerieuSerSerAsnAspAspGlyTyrGluAsnIleAspSerieuThrArglysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         165 CAAGATCAAGATAAGAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAAGGAGAAT 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATTAATCACATCCCCCATCAGAATCC 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGTITAGAGAAAGGTCAGAGACAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGGCCT 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

(bases 1 to 1045)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                527
135
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-527)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-005-907-2 (1-135) x BF242113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BF797507.1 GI:12102561
                                                                                                                                                                                                                                                                                   clones and v
Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                       .78e-73
                                                                                                                                                                                                                                                                                                                                                                                                        715.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  405
                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BF797507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
```

à g ò g ò g ò g ò g 459

47

62

g ò

8

OM protein

Run on:

Sequence:

```
BF242113 527 bp mRNA linear EST 14-NOV-2000
601880401F1 NIH_MGC_55 Homo sapiens CDNA clone IMAGE:4109064 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs r@mail.nih.gov
Tissue Procurement: ATC

CDNA Library Preparation: CLONETECH Laboratories, Inc.

CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LiNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.B. Consortium/LiNL at:

http://image.llnl.gov

Plate: LLCM993 row: a column: 01

High quality sequence stop: 518.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 527)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CE686854 tigr-gss-
BH085248 RPCI-24-3
          BM455198 A

RM455407 A

RM455407 A

AW963366 E

BQ214406 A

BQ214406 A

BQ214406 A

BG214403 B

BM45933 A

BM45933 A

BM45933 A

BM45934 A

BM45934 A

BM77680 A

BM77680 A

BM77680 A

BM77681 A

BM77661 A
                                                                                                                                                                                                                                                                                                                                                                                           CK397921
BX391573
AW480906
AG181241
CE686854
                                                                                                                                                                                                                                                                                                                                                                    BF797042
BG177483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .527
/organiam="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4109064"
                                                                                       BM458339
BM459235
AA311038
CB286394
                                                                                                                                           BG149093
CB320849
                                                                                                                                                                                                            BB629482
AK036553
                                                                                                                                                                                                                                    BU696543
BU932945
                                                                                                                                                                                                                                                              BX390865
BG176880
                                                                                                                                                                                                                                                                                                                                                       AY404588
BF797042
                                                                                                                                                                                                                                                                                                                                                                                                            BX391573
AW480906
                                      AY404586
AW963366
                                                                BQ214406
BG024891
                                                                                                                                                                                                 3G276546
                                                                                                                                                                                                                                                                                          30429114
                                                                                                                                                                                                                                                                                                                  AW519547
                                                                                                                                                                                                                                                                                                      3G276071
                           BM455407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BF242113.1 GI:11156040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
mRNA sequence.
                                                                                                                                                                                                                                                     116.6
116.3
115.3
115.3
115.1
114.8
114.6
114.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BF242113
                                                                                                                                                                                                                                                   118.5
118
116.5
                                                                                                                                                                                                                                                                                        112
110.5
109.5
                                                                                                                                                                                                                                                                                                                                             105.5
104.5
104
103.5
                                                                                                                                                                                                                                                                                                                                                                                                             102.5
101.5
101.5
100.5
  166.5
166.5
156.5
156.5
156.5
1140
1440
13.5
128
127
127
127
127
127
                                                                                                                                                                                                                                                                                                                                                                                                 102.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BF242113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
    υυ
                                                                                                                                                                                                                                                                                                                                                                                                                                        υ
                                                                                                                                                                                                                                                                                                                                                                                                                           Command line parameters:
-MODBL=frame+ p2n.model - 1087=x1h
-Q=/Cqn2_1/USPTO_epool/US10005907/runat_16112004_140457_6176/app_query.fasta_1.327
-Q=/Cqn2_1/USPTO_epool/US10005907/runat_16112004_140457_6176/app_query.fasta_1.327
-DB=EST -QFWT=fastap - SUFFIX=xst -MINMATCH=0.1 - LOOPCXT=0
-UNITS=bits -START=1 - END=-1 - MATRIX=blosum62 - TRANS=bluman40.cdi - LIST=45
-UNITS=bits -START=1 - END=-1 - MATRIX=blosum62 - TRANS=bluman40.cdi - LIST=45
-UNITS=bits -START=1 - HEAPSTZE=560 - WINIEN=0 - MAXLEN=200000000
-USER=US10005907 @CGN 1 1 3437 @runat_16112004 140457_6176 - NCPU=6 - ICPU=3
-NON MANAP - LARGEQGERS - NRG SCORES=0 - WAIT - DSPELOCX=100 - LONGLOG
- PDEV TIMEOUT=120 - WARN TIMEOUT=30 - THATABAS=1 - XGAPOP=10 - XGAPEXT=0.5 - FGAPOP=6
- FGAPEXT=7 - YGAPOP=10 - YGAPEXT=0.5 - DELOP=6 - DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BF242113 601880401
BF797507 602257174
AL560376 AL560376
BG389415 602414106
BM479887 AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             full-leng
AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      602290373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 602259560
                                                                                           November 19, 2004, 01:11:39; Search time 2705 Seconds (without alignments) 1818.619 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                         1 MGNYLLRKLSCLGENQKKPK......SVSRPCSCTHEHDYEVVFPH 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BG106563 (BF795688 (CR625820 BM904106 A
                   GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                     nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                32822875 segs, 18219865908 residues
                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BF242113
BF797507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG389415
BM479887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CR625820
BM904106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AL560376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BG106563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF795688
                                                                                                                                                                                                                Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                      seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length DB
                                                                                                                                                    US-10-005-907-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gb_est1::
gbb_est2::
gbb_htc::
gbb_est4::
gbb_est4::
gbb_gss1::
gbb_gss1::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       527
1045
917
924
1039
1095
1124
1000
                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0
24.3
23.7
23.7
23.7
23.7
23.7
23.7
23.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173.5
169.5
169.5
169.5
169.5
169.5
169.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                      Scoring table:
```

Minimum DB Maximum DB

Database

26459760

Searched:

Pan trogl Mus muscu

uu89g10.y up35b07.y

GENCOUR

UI-HF-BNO

CMD36\_D01 uu88h07.y AGENCOURT

uu69e05.y

AGENCOURT EST181808

uv06d06.y BB629482

Mus muscu

AGENCOURT LL2in1317

BX390865

602314133 AGENCOURT

602258082

33516 MAR Pan trogl

```
GAGGAGCÁGGAGCAGGAGGAGGAGGAGGAGGAGCTGCAACGCCGAGCGGAGGGC 196
                                                                                                                                                                                                                                                                                                                           197 AGGAACCGGAGCGCGAGCAGTAGCTGGGTGGGCACCATGGCTGGGATCAĊCACCATĊGAG 256
                                                                                                                                                                                                                                                                                                                                                                                            93 AspSerieuThrArgLysVal-----ArgGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                         ::: ||| |||:::||| |||
317 GAGCBCCTCCAGCGAGAAAGTTGAGGAGAAAAGGCGGGGAGCAGGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTGAGG
                                                                                                                                                                14 GluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMet 33
                                                                                                                                                                                HislleProHisGlnArgSerSerLeuSerSerAsn---AspAspGlyTyrGluAsnlle 92
                                                                                                                                                                                                              34 ThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluValSerSerThr
                                                                                                                                                                                                                                                                                                             -----TyrThrVallleAsn
                                                                                                                                                                                                                                                                                                                                                                      257 GCGGTGAAGCGCAAGATCCAGGTTCTGCAGCAGGCAGATGATGCAGAGGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           melanogaster genomic polynucleotide SEQ ID NO 33958.
                                 545 A; 568 C; 785 G; 403 T; 0 U; 0 Other;
hyperproliferative disorders, neurodegenerative disorders, cardiomyopathies, viral infections and metabolic disorders
                                                                                                                                                                                                                                                         SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCys---
                                                                     2301
29
24
51
24
3
                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                Indels:
                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Myers EW;
                                                                                                                                                 (1-2301)
                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrAlaLeuLeuArgThrSerVal 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGCCTCCTTGAACCGTAGGATC 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                x AAA09303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PWD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABL27495 standard; DNA; 1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0191637P
2000US-00614150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAR-2001; 2001WO-US009231
                                                                  0.427
96.00
41.41%
22.66%
13.43%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila; developmental pharmaceutical; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ľį
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Adams M,
                                                                                                                                            US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-656860/75.
                                 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (PEKE ) PE CORP NY.
                                                                                                   Similarity
                                Sequence 2301
                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200171042-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAR-2000;
11-JUL-2000;
                                                       Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Venter JC,
                                                                                                                                                                                                                                    17
                                                                                                                                                                                                                                                          54
                                                                                                                                                                                                                                                                               137
                                                                                                                                                                                                                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                  74
                                                                                                                                                                                                                                                                                                                                                                                                                                         110
                                                                                                                                                                                                                                                                                                                                                                                                                                                              377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABL27495
                                                                                                            Query Match:
                                                                                                   Local
                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best
                                                                                                                                                                  ઠ
                                                                                                                                                                                      g
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

73

```
GCCGCGTACCAGAACTACGTCAGCTGGATGATAAGCAGCAAGAGCTAATCACCGAT 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1179
                                                                                                                      18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGCGCGGGAATGGCAAAGATTTGGGCGATACACGCCCAGCGTGATGCGGCAAGAGGTG 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1180 AATGCGCTGTGCGCCGGTTGCGGAGCACCACTAGGAATGCGCTTCGAGATGACGGCGAT 1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1360 TATGIGGGCTCACIGGAGCGCCGCATCCAGCAACTGGAGGAGGGGGCGCACCACGCGCACG 1419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91 AsnileAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyr 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90
                                                                                       The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL16176-ABL30511), protessed DNA habr2072). The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 detection reagent for detecting 1000 or more for elucidating cell signaling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 AsnTyrLeuleuArgLysleuSerCys---LeuGlyGluAsnGlnLysLysProLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |||||||
1240 GGTTCCAGCTCCAGCACATGCAGATGCAGACATCACCGCCTTGAGGAACTATGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----GlyAsnProAspGluGluArgLysArgGlnGluMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1120 AATCTAGAGCTCAAGGAGCTCTGCCTCTACTTGGACGAGGGAGCGTGCCCATGTGGGGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----SerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---GluValCysTyrThrValIleAsnHisIleProHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----SerLeuSerSerAsnAspAspGlyTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal--
                                                            SEQ ID NO 33958; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                         Sequence 1824 BP; 500 A; 591 C; 493 G; 240 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                             1824
36
25
51
52
5
                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search completed: November 19, 2004, 01:51:20 Job time : 430 Becs
                                                                                                                                                                                                                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-005-907-2 (1-135) x ABL27495 (1-1824)
New isolated nucleic acid
genes from Drosophila and
                                                                                                                                                                                                                                                                                                                        0.716
93.00
37.20%
21.95%
13.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1420 ĠĊĊCATĊTÄCAA 1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              111 AlaLeuLeuArg 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78 GlnArgSer----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlySerGlu-
                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                interactions.
                                                                                                                                                                                                                                                                                                       Alignment Scores:
Pred. No.:
                                                            Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

ò

```
VP,
                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nandabalan K, Schulz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-303742/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB; AAY92331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200020448-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                    10-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-APR-2000
                                                                                                                                                                                                                                                                                             AAA09303;
                                    69
                                                                                                                                                                                                                                           RESULT 14
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                  셤
                                                                                                                                                                                          ð
                                  ò
                                                          d
                                                                                       à
                                                                                                            g
                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a composition which comprises two antisense oligonucleotides. The first oligonucleotide is specific for a cytoplasmic oncogene or proto-oncogene selected from ras, raf, EGF-1, cfms, c-ros, c-kit, c-met, c-trk, c-src, c-abl, c-rabl, c-fgr and c-yes. The second oligonucleotide is specific for a nuclear oncogene or proto-oncogene selected from myc, jun, c-ets, c-fos, c-myb, B-myb, c-rel, c-vay, c-ski, c-spi, cyclin Dl, PML/RAR alpha , AMLL/MTG8, EZA/prl and ALI-/AF4. The composition is used for treating cancer. The combination of antisense oligonucleotides has synergistically enhanced ability to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGGGAGCAGCGTTCTCCCAAAGTCAAATTAGACTGTTCTCTCTGAGCCTGTACTTCACCA 508
                                                                                                                                                                                                      Human; oncogene; proto-oncogene; neoplastic disease; anticancer; cancer; antisense oligonuclectide; c-trk; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the present sequence represents an oncogene from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluasnGlnLysLysProLysLysGlyAsnProAspGluGluargLysArgGlnGluMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34 ThrThrPheGluArglysLeuGlnAspGlnAspLysLysSerGlnGluValSerSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                    composition comprising two anti-sense oligo:nucleotide(s) cytoplasmic and nuclear oncogene(s).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54 SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCys-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         545 A; 568 C; 785 G; 403 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2301
29
24
51
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x AAV20445 (1-2301)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Col 99-102; 92pp; English.
                                                                                                        DNA; 2301 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 growth of cancer cells
                                                                                                                                                                                                                                                                                                                                                                            (UYJE-) UNIV JEFFERSON THOMAS.
                                                                                                                                                                                                                                                                                                                          94US-00306691.
                                                                                                                                                                                                                                                                                                                                                     94US-00306691.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.427
96.00
41.41%
22.66%
13.43%
                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                       Ë
                                                                                                                                                                                                                                                                                                                                                                                                       Calabretta B, Skorski
                                                                                                                                                                                    c-trk oncogene
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-229882/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2301 BP;
                                                                                                        AAV20445 standard;
                             uHis 127
                                                      512
                                                    GCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                             .5-SEP-1994;
                                                                                                                                                           17-JUN-1998
                                                                                                                                                                                                                                                                          US5734039-A
                                                                                                                                                                                                                                                                                                    31-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anticancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      targetting
                                                                                                                                   AAV20445;
     449
                              126
                                                     509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    inhibit
                                                                                                                                                                                      Human
                                                                                 RESULT
```

g ò 셤

```
AAA09303-09 were isolated in a modified yeast two hybrid system using NIK1 procein as "bait". These are known sequences which encode NIK1 interacting proteins. The invention concerns purified complaces of a NIK1 protein-interacting protein, where the interacting protein is chosen from TrKA, protein phosphatase lalpha, 14-3-3epsilon, alpha-tropomyosin, vimentin, p0071, Ini-1, IP-1, IP-2, IP-3, IP-4, or IP-5. NIK1 (also referred to as NeK2) is a human homologue of the Aspergillus nidulans microtic regulator, NIWA kinase. NIK1 is a serine/threonine-specific kinase and is thought to play a key role in cell-cycle events leading to the onset of mitosis. The complexes, their derivatives and NIK1 or NIK1-IP protein and DNA sequences, etc. are useful for treating or preventing a disease or disorder involving aberrant levels of the complex or protein. Such disorders include cancer,
                                                                                                                                                                                                                                                                                                                                        376
                                                                                                                                                                                                         316
                                                                                                                                                                                                                                                                            109
                                                                                                                                      92
   73
                                                                   197 AGGAACCGGAGCGCGAGCAGTAGCTGGGTGGCCACCATGGCTGGGATCACCATCGAG
                                                                                                                                         74 HisIleProHisGlnArgSerSerLeuSerSerAsn---AspAspGlyTyrGluAsnIle
                                                                                                                                                                                                         93 AspSerLeuThrArgLysVal-----ArgGlnPheArgGluArgSerGluThrGlu
                                                                                                                                                                                                                                                                                                                   New complex of a NLK1 protein and a NLK1 protein-interacting protein, useful for treating cancer, hyperproliferative disorder, neurodegenerative disorder, cardiomyopathies, viral infections and metabolic disorders.
----TyrThrValileAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NIK1 Interacting Protein; Trk oncogene A; TrkA; protein complex;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; antiviral; neuroprotective; cardiant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 126-130; 172pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         377 GTGGCCTCCTTGAACCGTAGGATC 400
                                                                                                                                                                                                                                                                                                                                                                                                                         110 TyralaLeureuArgThrSerVal 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Trk oncogene A coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
233. .2158
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA09303 standard; DNA; 2301 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US023314.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-00167206
```

```
3457 ACAAAACAAGAAGGAGAGGAGGGGGGGGCTGCGAAATT-----CAGCAAGCAGGG 3510
                                                                                                                                                                                                                                                                                                                                                                                                 :::
CTAAAGCTAGAAGCGAGGGGGGACGACACACTÀGAGAGAGAGA-----ACACATĠĊÄ 3624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---CATCGCTGGAGGATAGCGAAG 3672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125
                                                                                                                                                                                                                                                                                                                                                                                                                                  92 IleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyrAla 111
                                                                                                                                                                                                                         GluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMet 33
                                                                                                                                                                                                                                                                                                                            54 SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThrVallleAsn 73
                                                                                                                                                                                                                                                                                                                                                                               74 HislleProHisGlnArgSerSerLeu----SerSerAsnAspAspGlyTyrGluAsn 91
acid sequences may be useful in diagnostic and screening applications. The current sequence is that of a human soft tissue sarcoma-upregulated DNA of the invention. The current sequence is not shown within the specification per se but was submitted in CD format by the inventor.
                                                                                                                                                                                                                                                                          34 ThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluValSerSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rat; ds; gene; pain; neuronal tissue; gene therapy; spinal segmental nerve injury; chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
                                                              Sequence 3957 BP; 1055 A; 927 C; 969 G; 1005 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      112 LeuLeuArgThrSerValSerArgProCysSerCysThrHis----
                                                                                                          3957
35
21
54
20
5
                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3673 CACAGTCCAACACACACACACAGAGTC 3702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------GluHisAspTyrGluVal 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3625 CGGACGAGGTGGAGCGACGGAAACCC---
                                                                                                                                                                                                  x ADQ24942 (1-3957)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rat gene U02506, SEQ ID NO 7951,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-AUG-2001; 2001US-0312147P.
01-NOV-2001; 2001US-0346382P.
26-NOV-2001; 2001US-0333347P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-AUG-2002; 2002WO-US025765.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADE62022 standard; DNA; 584
                                                                                                      0.666
97.00
43.08%
26.92%
13.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GEN HOSPITAL CORP. BAYER AG.
                                                                                                                                                                                               US-10-005-907-2 (1-135)
                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003016475-A2
                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-FEB-2003
                                                                                                                                                                                                                          14
                                                                                                                                                                                                                                                                                                                                                                                                          3511
                                                                                                                                                                                                                                                                                                                                                                                                                                                             3571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE62022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GEHO ) (
(FARB ) 1
                                                                                                                                                          Query Match:
                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADE62022
                                                                                                                     Score:
8X8388
                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
The invention discloses a composition comprising two or more isolated rat or human polynucleotides or a polynucleotide which represents a fragment, derivative or allelic variation of the nucleic acid sequence. Also claimed are a vector comprising the novel polynucleotide, a host cell comprising the vector, a method for identifying a nucleotide sequence which is differentially regulated in an animal subjected to pain, an array, a method for identifying an agent that increases or decreases the expression of the polynucleotide sequence that is differentially expressed in neuronal tissue of a first animal subjected to pain, a method for identifying a compound which regulates the expression of a polynucleotide sequence which is differentially expressed in an animal subjected to pain, a method for identifying a compound that regulates the activity of one or more of the compound that regulates the activity of one or more of the polynucleotides, a method for producing a pharmaceutical composition, a method for identifying a compound useful in treating compound that regulates the activity of one or more of polyneptides or their antibodies. The polynucleotide or the compound that composition or small molecule that regulates the specification, a method for identifying a compound useful in treating compoulates its activity is useful for preparing a medicament for treating pain and a pharmaceutical composition comprising the one or more of pain and spared nerve injury (SNI) in an animal (e.g. gene modulates its activity is useful for preparing a medicament for the specification) which is differentially expressed during pain. Note: The specification, but was obtained in electronic form directly from MIPO at the pain in the specification of the print of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New composition comprising two or more isolated polypeptides, useful for preparing a medicament for treating pain in an animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33 MetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluValSerSer 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                70 ThrVallleAsnHisIleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyr 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 GlyGluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53 ThrSer-----AsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             344 TCTTTTCTGTCTCACCTT------TCCCTTCGGTCACTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 584 BP; 247 A; 75 C; 175 G; 87 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      584
32
25
53
12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                          Costigan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-584)
                       ×
                                                                                                                                                                                                     Claim 1; Page; 1017pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x ADE62022
                       Befort
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.0603
96.50
46.72%
26.23%
13.50%
                     D'urso D,
                                                                WPI; 2003-268312/26.
GENBANK; U02506.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                     Woolf C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                   New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

90 GluAsnileAspSerieuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu

8 8 8 8

389 TAAGAGCAAGATACTCTGACCTCTTAATTTGGAGATTTTGAGCAACAGGAAGAGGACGGAG

110 TyrAlaLeuLeuArgThrSerValSerArgProCysSer

448

---CysThr-HisGl 126

```
21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                         19-MAR-2002; 2002WO-US008278
                                              (HUMA-) HUMAN GENOME SCI INC.
                                                     Rosen CA, Ruben SM;
                                                           WPI; 2003-167512/16.
P-PSDB; ADA57026.
          WO2002102994-A2
   Homo gapiens
                 27-DEC-2002
```

diagnosing, treating or preventing e.g. immune disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, or neurodegenerative disorders, or polypeptides comprishing an amino acid sequence at least 95% identical to the new Sequences. The polypeptides, antibodies or antibody fragments that bind to the polypeptides, nucleic acids encoding the polypeptides, agonists or antagonists that binds to the polypeptide, are useful in preparing diagnostic or pharmaceutical compositions for diagnosing, treating or preventing an e.g. immune compositions for diagnosing, treating or preventing an e.g. immune compositions fe.g. gastric, ovarian or lung cancer, CNS disorders (e.g. gastric, ovarian or lung cancer), cancers (e.g. gastric, ovarian or lung cancer), and disease, clasorders (e.g. parkinson's disease or Alzheimer's disease), and cardiovascular disorders (e.g. atherosclerosis or incurdes or myocarditis). The capping, for controlling gene expression through triple helix formation or antisense DNA or RNA, in gene therapy, for identifying individuals from minute biological samples, in forensic blology, and as hybridization or antisense DNA or RNA, in gene therapy for identifying individuals grobes. The polypeptides are useful for as molecular weight markers on controlling early and se hybridization cor antisense antibodies, for testing biological activities, and for testing processes, and for testing processes, and for testing biological activities, and for testing biological activities, and for testing the descriptory and the processes or testing biological activities, and for testing biological activities, and for testing the descriptory and the processes or testing biological activities, and for testing the descriptory and the processes or testing biological activities, and for testing the descriptory and the processes or testing belongians and the processes or testing biological activities, and the processes or testing belong treating or preventing neural disorders, immune system disorders, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal, proliferative and/or cancerous diseases. This sequence corresponds to a gene encoding one of the polypeptide of the invention. Note: The sequence data for this patent did form part of the printed specification, but was obtained in electronic format directly from WIPO at The invention relates to 592 new human secreted polypeptides useful for New human secreted polypeptides and polynucleotides, useful for diagnosing, treating or preventing e.g. immune disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, or ftp.wipo.int/pub/published\_pct\_sequences Claim 21; SEQ ID NO 319; 1754pp; English neurodegenerative disorders

Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;

Length: Matches: Conservative: Mismatches: Indels: 0.19 98.00 38.26% 24.16% 13.71% Percent Similarity: Best Local Similarity: Query Match:

US-10-005-907-2 (1-135) x ADA56130 (1-1892)

ઠે

LeuLeuArglysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro 24 572

The invention relates to a novel method for detecting soft tissue sarcoma which comprises obtaining a first soft tissue sample from an individual and a normal soft tissue sample from the same or different individual, determining the expression of a gene in both samples and comparing the expression of the soft tissue samples, where a higher level of protein expression in the first soft tissue sample indicates the presence of soft tissue sarcoma. The method of the invention has cytostatic applications and may be useful for detecting soft tissue sarcoma, possibly via gene therapy or vaccine production. The nucleic soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human; 811 871 104 872 CCTATGATAATGGAGAACATCCAGGAGCTCATCGATCAGCCCCAGGAAATAGATG 931 -----ArgSerGluThrGluTyrAlaLeuLeuArg 114 ||||:::||||||||::: 932 AATGAAATATATGATGAGAACTCCTACTGGAGAAAACCAAAACCCTGGCAGCTCCTGCAG 991 751 80 64 Early detection of soft tissue sarcoma comprises determining expression of a gene in a first soft tissue sample and a normal soft tissue sample and comparing the gene expression, also useful in treating soft tissue 25 AspGluGluArgLysArgGlnGluMetThrTheGluArgLysLeuGlnAspGlnAsp 44 45 LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGlySerGlySer 752 AAGGAGGGAGGCTGTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCT 812 GAATCTCTATCTACCTTCCTCTTTTGCTCCCGGGTACGAGAAGTAGAGTACT 632 CAAGGAGTGGAGCACAĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĀĀĀĀĀĠĀĠĀĀĀĠĀĠĀĀĀ 65 GluGlu------ValCysTyrThrValIleAsnHisIleProHisGlnArgSer -----GluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGlu---81 ---SerLeuSerSerAsnAspAspGlyTyr------Human soft tissue sarcoma-upregulated DNA - SEQ ID 7762. Example 2; SEQ ID NO 7762; 210pp; English. 992 CTGCCCCACACAGCCTTGCTGGTGC 1018 115 ThrSerValSerArgProCysSerCys Zlotnik A; (PROT-) PROTEIN DESIGN LABS INC. ADQ24942 standard; DNA; 3957 26-NOV-2003; 2003WO-US038193. 26-NOV-2002; 2002US-0429739P 26-AUG-2004 (first entry) Ginsburg WM, WPI; 2004-441208/41. 402004048938-A2 Homo sapiens 10-JUN-2004 90 105 Aziz N, RESULT 11 ADQ24942 셤 ò d à 셤 d ò 8 셤 à

œ

```
8
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΩD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                    811
                                                                                                                                                                                          ----ArgSerGluThrGluTyrAlaLeuLeuArg 114
                                                                                                                       871
                                                                                                                                               104
                                                                                                                                                                                                          932 AATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAAACCCTGGCAGCCTCCTGCAG 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to an isolated polypeptide or human secreted protein. The polypeptides, nucleic acid molecules, antibodies or their fragments, and agonists or antagonists that bind are useful for preparing a diagnostic or paramaceutical composition for diagnosing or treating allergic or asthmatic disorders. The polypeptide is also useful for identifying a binding partner by contacting the polypeptide with a binding partner, and determining whether the binding partner increases or acid molecules are also useful for detecting, preventing, diagnosing, prognosticating, treating or ameliocating inflammatory disorders prognosticating, treating or ameliocating inflammatory disorders neoplastic diseases , wound healing and disorders of epithelial cell proliferation, immune disorders, cardiovascular disorders, blood-related
80
                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                            human secreted protein; Antiallergic; Antiinflammatory; Antibacterial;
Anti-HIV; Cytostatic; Immunosuppressive; Hemostatic; ss.
                                                    ---GluAsnileAspSerLeuThrArgLysValArgGlnPheArgGlu---
                                                                                                                                                            CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCCAGGAAATAGALGAAATG
                                     ---ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                              GAATCTCTATCTAACCTTCCTCTTTTGCTCCCGGGTACGAGAAGTAGAGTCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing treating allergic or asthmatic disorders, or related immediate
                                                                                       ---SerLeuSerSerAanAspAspGlyTyr-----
                                                                                                                                                                                                                                                                                                                                                                                                  Human secreted protein encoding sequence #105.
                                                                                                                                                                                                                                                                992 CTGCCCCACACAGGCCTTGCTGGTGC 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 7; SEQ ID NO 105; 1323pp; English.
                                                                                                                                                                                                                                            ThrSerValSerArgProCysSerCys
                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                     ADD37623 standard; cDNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-MAR-2002; 2002WO-US008279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hypersensitivity disorders.
                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-140218/13.
                                    GluGlu.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200290526-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                         15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rosen CA,
                                     65
                                                                                      81
                                                                                                                                        90
                                                                                                                                                                                          105
                                                                                                                                                                                                                                              115
                                                                                                                                                                                                                                                                                                                                                ADD37623;
                                                                                                                                                                                                                                                                                            RESULT 9
ADD37623
                                                                                                                                                                                                                                                                                                                     ò
                                                           셤
                                                                                  ò
                                                                                                         g
                                                                                                                                     à
                                                                                                                                                          П
                                                                                                                                                                                       δ
                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                  g
```

```
endocrine disorders , or gastrointestinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 572 CTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGGAGCAAGCGCCAGAAGCACAAGCAGGAG 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         872 CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAATG 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  812 GAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACT 871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------ArgSerGluThrGluTyrAlaLeuLeuArg 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    932 AATGAAATATATGATGAGAACTCCTACTGGGAGAAAACCAAAAACCTGGCAGCCTCCTGCAG 991
                                                                                                                                                                                                                                                                                                                                                                                                                           LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45 LysLysSerGinGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic; cerebroprotective, neuroprotective, nootropic; cardiovascular; antiarteriosclerotic; gene therapy; mumus escreted protein; immune disorder; inflammation; respiratory disorder; ancer; CNS disorder; neurodegenerative disorders; inflammatory bowel disease; nebritis; Crohn's disease; asthma; allergy; multiple sclerosis; ischaemic brain injury; Parkinson's disease; Alzheimer's disease; atherosclerosis; myocarditis; chromosome mapping; triple helix formation; antisense gene therapy; forensic biology; ds;
          disorders. The nucleic acids are also useful for chromosome identification, radiation hybrid mapping or long-range restriction mapping, as molecular weight markers, or as hybridization or diagnostic probes. The polypeptides and antibodies are useful for providing immunological probes for differential identification of the tissues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GluGlu------ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                     present sequence represents a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                immunosuppressive; antiinflammatory; antiasthmatic; antiallergic;
                                                                                                                                                                           Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;
                                                                                                                                                                                                                                             1892
36
21
62
30
                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---SerLeuSerSerAsnAspAspGlyTyr----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          encoding human secreted protein #309.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CIGCCCACACAGAGCCITGCIGGTGC 1018
                                                                                                                                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                US-10-005-907-2 (1-135) x ADD37623 (1-1892)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        115 ThrSerValSerArgProCysSerCys
                                                                                                                                         secreted protein encoding sequence.
                                                                                                                     istochemistry assays. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADA56130 standard; DNA; 1892 BP
                                                                                                                                                                                                                                           0.19
98.00
38.26%
24.16%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                   Best Local Similarity:
                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                             'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADA56130;
                                                                                                                   :immunoh:
                                                                                                                                                                                                                                                                                                                      Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADA56130
```

```
thrombocytopenia), allergic reactions including asthma or eczema, inflammatory disorders (e.g. ischaemia-reperfusion injury, inflammatory bowel disease or Crohn's disease), neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's disease), cardiovascular disorders (e.g. atherosclerosis, myocarditis), infectious diseases (bacterial, fungal or viral infections including HIV/AIDS), or wound healing and disorders of epithelial cell proliferation. The nucleic acids are also useful for chromosome identification, radiation hybrid mapping or long-range restriction mapping, as molecular weight markers, or as hybridization or diagnostic probes. The polypeptides and antibodies are useful for providing immunological probes for differential identification of the tissues immunohistochemistry assays. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antianaemic; antirheumatic; antiarthritic; antiinflammatory; antithyroid; antidiabetic; immunosuppressive; dermatological; nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Crecracaarcerecriereceresaagecaageaagecaageageacaaageagaage 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluGlu-------ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           912 GAATCTCTATCTTCTACCTCTTTTGCTCCCGGGTACGAGAAGTAGAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---GluasnileaspSerLeuThrargLysValargGlnPheArgGlu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTATGATAATGAAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----ArgSerGluThrGluTyrAlaLeuLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
haematopoietic or haematological disorders (e.g. anaemia,
                                                                                                                                                                                                                                                                                 Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                    1892
336
21
62
30
                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human secreted protein-related DNA - SEQ ID 211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCCCCACACAGAGCCTTGCTGGTGC 1018
                                                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---SerieuSerSerAsnAspAspGlyTyr-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             115 ThrSerValSerArgProCysSerCys 123
                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-005-907-2 (1-135) x ADA39940 (1-1892)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADC73578 standard; DNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                    0.19
98.00
38.26%
24.16%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADC73578;
   anaemia),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              105
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 8
ADC73578
                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          do
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
   à
```

```
the invention transfer to a nover number section prolypeptica.

defined sequence given in the specification. The polypeptica, nucleic acid molecule, antibody, agonist or antagonist of the invention may be useful for preparing a composition for diagnoshing or treating a haemopoietic or haematologic disorder such as anaemia, autoimmune disorders such as rheumatologic disorder such as anaemia, autoimmune disorders such as rheumatologic disorder such as anaemia, autoimmune clabetes systemic lupus erythematosus or glomerulomphiritis, neurodegenerative disorders including Parkinson's disease and Alzheimer's disease, wounds and hyperproliferative disorders including atherosclerosis or cancer, as well as bacterial, viral, fungal or atherosclerosis or cancer, as well as bacterial, viral, fungal or berseitic infections. The polypeptide any also be used during gene the polypeptide with a binding partner and determining whether the binding partner increases or decreases the activity of the polypeptide. The current sequence is that of the human secreted protein-related DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGGAGTGGAGCACAGGAGGCGACACAAGAACACAAGGAGGAAAGAGGGGGCAAAAA 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hematopoietic or hematologic disorders (e.g. anemia), autoimmune disorders (e.g. diabetes) or hyperproliferative disorders (e.g. cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |||||||:::
| CTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGGAGCAAGCGCAGAAGCACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             relates to a novel human secreted polypeptide comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
               fungicide; antiparasitic; antiarteriosclerotic; vulnerary; cytostatic; haemopoletic; haematologic; anaemia; autoimmune disorder; rheumatologic anaemia; autoimmune disorder; systemic luque erythematosus; finflammation; offave's disease; diabetes; parkinson's; Alaheimer's; wound; hyperproliferative; atherosclerosis; cancer; bacterial; viral; fungal; parasitic infection; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polypeptide for diagnosing, preventing or treating
neuroprotective; nootropic; antibacterial; virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1892
36
21
62
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          472 G; 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 27; SEQ ID NO 211; 2272pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-005-907-2 (1-135) x ADC73578 (1-1892)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            565
                                                                                                                                                                                                                                                                                                                                21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                                                                                                                                                                                                                               19-MAR-2002; 2002WO-US008277
                                                                                                                                                                                                                                                                                                                                                                                                            (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.19
98.00
38.26
24.16%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 461 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-430516/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atherosclerosis).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P-PSDB; ADC74193
                                                                                                                                                                                                                   WO2003038063-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disorders (e.g.
                                                                                                                                               human; gene; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention
                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aliqnment Scores:
                                                                                                                                                                                                                                                           08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rosen CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
No.:
         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

45 LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer

ò

φ

us-10-005-907-2.rng

```
Ruben SM, Ni J, Rosen CA, Yu G, Young PE, Feng P, Soppet DR;
Wei Y, Endress GA, Duan RD, Kyaw H, Ebner R, Lafleur DW, Olsen HS;
Shi Y, Moore PA;
                                                                                                                                                                                                                    New isolated human genes, useful for diagnosis and treatment of e.g. cancers, neurological disorders, immune diseases, inflammation or blood disorders.
                                                                                                                                                                                                                                                    Claim 1; Page 346; 484pp; English.
                                              9805-0078566P
9805-0078574P
9805-0078574P
9805-0078576P
9805-0078579P
9805-0078579P
9805-0078579P
                          99WO-US005804
                                                                                                                               98US-0080314P
                                                                                                                                             (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                              WPI; 1999-562050/47.
                                                                                                                                                                                                      P-PSDB; AAY41387.
                                                      19-MAR-1998;
19-MAR-1998;
19-MAR-1998;
                        18-MAR-1999;
                                                                                               19-MAR-1998;
                                                                                                                               01-APR-1998;
        23-SEP-1999
                                                                              19-MAR-1998
                                                                                       19-MAR-1998
                                                                                                      19-MAR-1998
                                                                                                               01-APR-1998
                                                                                                                     01-APR-1998
                                                                                                                                                             Ruben
```

This sequence represents a nucleic acid molecule which encodes a secreted human protein. The gene number, and the clone it is derived from, are detailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. AAZ24802) for increasing the stability of the fused protein as genes and their fragments (nucleic acid sequences: AAZ24811-Z24907; amino acid sequences AAY41308-Y41404) which are useful for preventing, treating or amelioraring medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new polynucleotides. Specific uses are described for each of the in (see AAZ24811 for described uses) Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;

1892 36 21 62 30		
Length: Matches: Conservative: Mismatches: Indels:	(1-1892)	
0.19 98.00 38.26% 24.16% 13.71%	x AAZ24890	
Alignment Scores: Pred. No.: Score: Percent Similarity: Best Local Similarity: Query Match:	US-10-005-907-2 (1-135) x AAZ24890 (1-1892)	

24	631	44	691	64	751	80
5 LeuleuArgiysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro 24	572 CTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGAGCGAGAGCGCAGAGCACAAGCAGGAG 631	25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp 44	632 CAAGGAGTGGAGCACAGGAGGCGACACAAGAACACAAGGAGGAAGAGGGGGCAGAAA 691	45 LysLysSerGlnGluValSerSerThrSerAsnGluAsnGluAsnGlySerGlySer 64	692 CAGGAAGAGCAAGAAGAAGAAGAAGAAGAGGAGAAGAAGA	65 GluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer 80
S	572	25	632	45	692	65

a

d ò

g ઠે

ò

QQ	752	:::
ŏ	81	SerLeuSerSerAsnAspAspGlyTyr
qq	812	
ά	06	
qq	872	
ò	105	
Ωp	932	AATGAAATATATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAGCCTCCTGCAG 991
ò	115	ThrSerValSerArgProCysSerCys 123
οp	992	992 CTGCCCCACACAGAGCCTTGCTGGTGC 1018
ADA	RESULT 7 ADA39940	
12	ADA39940	ADA39940 standard; cDNA; 1892 BP.
\$ \$ \$	ADA39940;	
i i X	20-NOV-2003	03 (first entry)
E X	Human sec	Human secreted protein encoding cDNA.
<b>3</b> 3	Human; se	Human; secreted protein; cancer; hyperproliferative disorder;
¥	anaemia;	incumatory arthiris; autolmmune disorder; naematopoietic disorder; anaemia; allergic reaction: asthma: cardiovascular disorder.
XX.	wound hea	wound healing; cytostatic; immunosuppressive; nootropic; neuroprotective;
¥ %	ancivirai vulnerary	antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; vulnerary; cardiant; gene therapy; ss.
χö	OHOD.	
3	HOMO SADIEUS	

21-MAR-2001; 2001US-0277340P. 19-JUL-2001; 2001US-0306171P. 13-NOV-2001; 2001US-0331287P. 19-MAR-2002; 2002WO-US008123 WO2002102993-A2 27-DEC-2002 

(HUMA-) HUMAN GENOME SCI INC.

Rosen CA, Ruben SM;

WPI; 2003-175238/17.

New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing, preventing or treating cancer or other hyperproliferative disorder, asthma, allergies or AIDS.

Claim 9; SEQ ID NO 322; 3205pp; English

The invention relates to novel genes ADA39629-ADA40565 and proteins ADA40566-ADA41501 for human secreted proteins, useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The polypeptides, nucleic acid molecules, antibodies or their fragments, and agonists or antagonists that bind to the polypeptide are useful for preparing a diagnostic or pharmaceutical composition for diagnosing or treating cancer or other hyperproliferative disorder. The polypeptides and nucleic acid molecules are also useful for detecting, preventing, diagnosing, prognosticating, treating or ameliorating cancer or other hyperproliferative disorders including neoplasms, autoimmune disorders (e.g. diabetes, rheumatoid arthitis, systemic lupus erythematosus, multiple sclerosis, autoimmune thyroiditis or haemolytic

```
The polynucleotides and polypeptides are useful in diagnostics,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09947540-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                       70
                                                                                                                                                                                                                                                                                                                                                                                            446
                                                                                                                                                                                                                                                                                                                                                                                                                 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ24890;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BXSXEE EEEEEEEEEEEEEEEEEEEEEEE
                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
  8888888888888888888
                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                   1332
                             1216 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 1272
                                                                                                                                                                                                                                                                                                                                                                                                                Human; gene; ss; genetic disorder; gene mapping; medical imaging; cancer; neurodegenerative disorder; lymphoid cell disorder; osteoporosis; parkinson's disease; Alzheimer's disease; bone degenerative disorder; osteoarthritis; periodontal disease; liver fibrosis; viral infection; fungal infection; bacterial infection; autoimmune disease; diabetes; atopic dermatitis.
                                                                                                                                                                                 81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to human polynucleotides and the polypeptides they
                                                                                               GlnAspLysLysSerGlnGluValSerSerThrSer---AsnGlnGluAsnGluAsnGly 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated polypeptides and polynucleotides, useful for preventing, treating or ameliorating medical conditions, such as cancer, neurodegenerative disorders, lymphoid cell disorders, bone degenerative
                                                                                                           62 SerGlySerGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     بن.
بنا
                                                                                                                                                                                                                           101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ren
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhao QA,
z, Ghosh 1
                                                                                                                                                                                                                                                                                      1513 AGGCATGCCCGATCCCCAGAAGATGAATATGAACTTTTCATGCCTCAC 1560
                                                                                                                                                                                                                                                                    CysSerCys --- ThrHisGluHisAspTyrGluValValPheProHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhang J,
R, Wang
                -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tang YT, Zhou P, Goodrich R, Asundi V, Kue AJ, Yang Y, Ma Y, Yamazaki V, Chen Wehrman T, Wang J, Wang D, Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                claim 1; SEQ ID NO 123; 235pp; English.
                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                              novel polynucleotide #123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-MAR-2002; 2002WO-US005109.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAR-2001; 2001US-00810173.
                                                                                                                                                                                                                                                                                                                                  ABX05108 standard; cDNA; 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disorders, and infections.
                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-040556/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P-PSDB; ABU00030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200274961-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                           17-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xue AJ, Ya
Wehrman T,
                                                                                                                                                                                                                                                                                                                                                       ABX05108;
                                                                                                                                                                                                                                                                     121
                                                                                                  43
                20
                                                        31
                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                          ABX05108
                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                        a
                                                                             g
                                                                                                                     g
                                                                                                                                          ò
                                                                                                                                                              В
                                                                                                                                                                                   ò
                                                          ò
                                                                                                  ò
```

```
Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; ds; immune system; asthma; lymphocytic disease; brain; hepatic; lymphom; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AlDS; cognitive disorder; schizophrenia; prostate; obsity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroidditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
forensies, gene mapping, medical imaging, identification of mutations responsible for genetic disorders or other traits, assessing biodiversity and producing many other types of data and products dependent on DNA and amino acid sequences. They are also useful for preventing, treating or amino acid sequences. They are also useful for preventing, treating or ameliorating medical conditions, such as cancer, neurodegenerative disorders (e.g. Parkinson's disease, Alzheimer's disease), lymphoid cell periodontal disease, liver fibrosis, infections (e.g. viral, fungal or bacterial) or autoimmune diseases (e.g. diabetes, atopic dermatitis). Sequences ABX04986-ABX05311 represent human polymucleotides of the invention. Note: The sequence data for this patent is not represented in the printed specification but is based on sequence information supplied by the Buropean Patent Offlice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluTyrAlaLeuLeuArgThrSerValSerArgProCysSerCys---ThrHisGluHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31 GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrValileAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |||||||||||:::
TATGAGAATGTICCCTGCAAAGCTGAGAGACCCAGAGAGTCCTTGGGAGGAACTGAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrGluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerserThrSer---AsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                377
337
339
44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 775 BP; 226 A; 202 C; 160 G; 187 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human secreted protein gene 80 clone HLWAY54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-775)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATATGAACTICTCATGCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x ABX05108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ24890 standard; DNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.7e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149.00
60.19%
34.26%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20.84%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                32-DEC-1999
```

```
254 GAAGGGTGTTTCTGCCTTCCATGGAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 310
                                                                                                                                                                                                                                                                                          311 TCCCAAAACGAAAATGAAAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 370
                                                                                                                                                                                                                                                                                                                                              82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                        GGAAACTCTGCTGAAGAATACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; gene; secretory protein; secretory polymucleotides; SPTM; SPTM-related disease; somatic gene therapy; germline gene therapy; severe combined immunodeficiency; intracellular parasite protection; fungal parasite; fumunosan parasite; cell proliferative disorder; cancer; mmune disorder; AIDS; neurological disorder; Parkinson's disease; motor neuron disorder; demyelinating disease; multiple sclerosis; meningitis; abscess; prion disease; cerebral palsy; neuroskeletal disorder; peripheral nervous system disorder; dermatomyositis; polymyositis; myopathy; myasthenia gravis; mental disorder; Tourette's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                            PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                              30
                                                                                                                                                                                                                     42
                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                            62
                                                                                               1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                          ::: :::||| :::
194 AATGTGAGAATGCAAAGGCCCCAAACAGAGAACATCCAGATCAGGATCACCATATCGCT
                                                                                                                                                                                                              -----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                     43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                            63 GlySerGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     551 CATGCCCGATCCCCAGAAGATGAATGTGAACTTCTCATGCCTCAC 595
     33
54
21
5
                                                                                                                                                      -----LysLysGlyAsnProAspGluGluArgLysArg-
    Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human secretory polynucleotide (sptm) 46.
                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                   US-10-005-907-2 (1-135) x ACC59951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABL99791 standard; cDNA; 1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0229747P.
2000US-0229748P.
2000US-0229749P.
2000US-0229750P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-AUG-2001; 2001WO-US027297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200220756-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-SEP-2000; 2
05-SEP-2000; 2
05-SEP-2000; 2
05-SEP-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-MAR-2002
                                                                                                                                                        20
                                                                                                                                                                                                               31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABL99791;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                        임
                                                                                                                                                                              q
                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                           Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                      δ
                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

```
The invention comprises the amino acid and coding sequences of human

Secretory (SPTM) proteins. The SPTM DNA and amino acid sequences are

Secretory (SPTM) proteins. The SPTM DNA and amino acid sequences are

Secretory (SPTM) proteins. The SPTM DNA sequences are useful for somatic or

C functional SPTM. The SPTM DNA sequences are useful for somatic or

C combined immunodeficiency). The SPTM DNA sequences are also useful in

D providing protection against intracellular parasites (e.g. fungal

C parasites and protezoan parasites). The SPTM DNA and protein sequences

C are also useful for diagnosing cell proliferative disorders, cancer,

C immune disorders (e.g. AIDS), neurological disorders (e.g. Parkinson's

C disease), motor neuron disorders, demyellnating diseases (e.g. multiple

CC sclerosis), menightis, abscesses, prion diseases, cerebral palsy,

C neuroskeletal disorders, peripheral nervous system disorders,

C dermatomyositis and polymyositis, myopathy, myasthenia gravis, and mental

disorders (e.g. Tourette's syndrome). CDNA sequences ABL99910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polynucleotide sequences encoding human secretory proteins useful for gene therapy of e.g. genetic deficiency disorders, cancers, and diseases caused by intracellular parasites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stuart J, Lincoln SE, Altus CM, Dufour GE, Chalup MS, Hillman JL; Jones AL, Yu JY, Wright RJ, Gietzen D, Liu TF, Yap PE, Dahl CR; Momlyama MG, Bradley DL, Rohatgi SD, Harris B, Roseberry AM; Gerstin EH, Peralta CH, David MH, Panzer SR, Flores V, Daffo A; Marwaha R, Chen AJ, Chang SC, Au AP, Inman RR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1643 BP; 413 A; 382 C; 384 G; 460 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disorders (e.g. Tourette's syndrome). CDNA sequences ABL99 represent human secretory polynucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 275-276; 585pp; English.
                                                                                   2000US-0230517P.
2000US-0230518P.
2000US-0230519P.
2000US-0230596P.
2000US-0230597P.
2000US-0230597P.
2000US-0230610P.
2000US-0230664P.
2000US-0230864P.
                                                                                                                                                                                                                                                                                    2000US-0230999P.
2000US-0230990P.
2000US-0230896P.
                                                                                                                                                                                                                                                                                                                                      2000US-0230897P.
2000US-0230951P.
2000US-0231163P.
                                                                                                                                                                                                                                                                                                                                                                                          2000US-0231832P
                                                                                                                                                                                                                                                                                                                                                                                                                            (INCY-) INCYTE GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-315658/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB; ABB97794
05-SEP-2000,
05-SEP-2000,
06-SEP-2000,
06-SEP-2000,
06-SEP-2000,
06-SEP-2000,
06-SEP-2000,
                                                                                                                                       06-SEP-2000;
                                                                                                                                                                                         06-SEP-2000;
                                                                                                                                                                          06-SEP-2000;
                                                                                                                                                                                                                            06-SEP-2000;
                                                                                                                                                                                                                                                                06-SEP-2000;
                                                                                                                                                                                                                                                                                  06-SEP-2000;
                                                                                                                                                                                                                                                                                                                      07-SEP-2000;
```

1096 ATGGGAAATTCTCTGCTGAGAGAAAACAGGGGGGGAGCAGCAGAACACTCAAGAGAGATGCCTTGG 1155

1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyCluAsnGlnLysLysPro--- 19

US-10-005-907-2 (1-135) x ABL99791 (1-1643)

1643 47 32 55 22 6

Length:
Matches:
Conservative:
Mismatches:

8.15e-09 159.00 50.64% 30.13% 22.24%

Best Local Similarity:

Query Match: DB:

Percent Similarity:

Alignment Scores:

Indels:

```
SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATTAATCACATCCCCCATCAGAGATCC 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             recercadecrecadreareareacrateacarearearecrecercadadeadagada 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGGCCT 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; immune response associated protein; IRAP; anti-HIV; antiallergic; antiinflammatory; antianaemic; antiparkinsonian; mootropic; antithyroid; anticonvulsant; antiarteriosclerotic; antiasthmatic; immunosuppressive; cytostatic; hepatotropic; dermatological; antidabetic; nephrotropic; antigout; thyromimetic; neuroprotective; osteopathic; nephrotropic; antiparastic; antibachtatic; uropathic; protoxocacide; antithermatic; haemostatic; antibacterial; virucide; ophthalmological; fungicide; gene therapy; immune system disorder; neurological disorder; muscle disorder; cell proliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                            84
response in a patient. The protein can also serve as a target that modulate gene expression or activity and as an antigen to raise polyclonal or monoclonal antibodies. (Il is useful for identifying agents that modulate expression of the protein or agents, such as agonists or antagonists. The agonists or antagonists are useful for modulating biological activity and function of (II) and thus are useful for alleviating disease conditions such as allergic hypersensitivity, seasonal rhinitis, asthma, urticaria, atopic dermatitis or mastocytosis
                                                                                                                                                                                                                                                                                                                                                                                                                                              21 LysglyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                              GlnAspGlnAspLysEysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer
                                                                                                                                                           Sequence 3762 BP; 1220 A; 672 C; 680 G; 1190 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTTCCTGCACCCATGAGCATGATTATGAAGTTGTGTTTCCACAC 429
                                                                                                                                                                                                                  3762
135
0
0
0
                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human IRAP-28 encoding cDNA SEQ ID NO:63
                                                                                                                                                                                                                                                                                                                                            US-10-005-907-2 (1-135) x ABN81319 (1-3762)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC59951 standard; cDNA; 732 BP
                                                                                                                                                                                                                9.5e-75
715.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     infection; gene; ss
                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUL-2003
                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC59951;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC59951
                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
         88888888888888
                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

Location/Qualifiers

Homo sapiens

```
XX ACC5924 to ACC5958 encode the human immune response associated proteins CC given in ABR41205 to ABR41219, designated IRAP-1 to IRAP-29 (I). (I) have anti-HIV, antiallergic, antiinflammatory, antianaemic, antiparkinsonian, nootropic, anticonvulsant, antiatreriosclerotic, antiaschmatic, antigout, immunosuppressive, antithyroid, cytostatic, hepatotropic, dermatological, antidathritic, entinelminatic, hepatotropic, dermatological, antidarasitic, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, correcteded of protozoacide and fungicide activities and antagonists are useful for diagnosing, treating or preventing disorders associated with aberrant cargines, autoimmune thyroiditis, contact dermatis, Crohn's disease, allergies, autoimmune thyroiditis, contact dermatis, Crohn's disease, clasease, Hashimoto's thyroiditis, irritable bowel syndrome, gout, Graves' disease, Hashimoto's thyroiditis, irritable bowel syndrome, cyndrome, rheumatoid arthritis, osteoporosis, pancreatitis, Raiter's syndrome, rheumatoid arthritis, osteoporosis, pancreatitis, Raiter's cyndrome, rheumatoid arthritis, osteoporosis, pancreatitis, cor mental retardation), muscle disorder (e.g. cardiomyopathy, myocarditis or mental retardation), muscle disorder (e.g. cardiomyopathy, myocarditis or mental arthritis, paroxysmal nocturnal harming or cancer), catherosclerosis, primary thromosoytopaemia or cancer), or viral, bacterial, fungal, parasitic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New human immune response associated proteins and polynucleotides, useful for diagnosing, treating or preventing immune system disorders, e.g. AIDS or anemia, cell proliferative disorders, e.g. cancer, or neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ho A, Baughn MR, Becha SD, Burford N, Elliott VS, Emerling BM; Forsythe IJ, Gorvad AE, Griffin JA, Hafalia AJA, Honchell CD; Ison CH, Burrill JD, Blake JJ, Lee EA, Marquis JP; Margus PM, Lee E, Sprague WW, Swarnakar A, Tang YT, Tran B; Tran UK, Bhatia U, Chawla NK, Warren BA, Zheng W, Xu Y, Yue H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 732 BP; 213 A; 178 C; 178 G; 163 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protozoan or helminthic infections
134. .670
/*tag= a
/product= "IRAP-28"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 5; Page 208; 213pp; English.
                                                                                                                                                                                                                                                                                                         21-NOV-2001; 2001US-0332140P.
07-DEC-2001; 2001US-0347639P.
09-JAN-2002; 2002US-0347639P.
01-EBE-2002; 2002US-0358279P.
01-MAR-2002; 2002US-0361088P.
15-MAR-2002; 2002US-0361088P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.55e-10
169.50
                                                                                                                                                                                                                           2001US-0327395P.
                                                                                                                                                                                                                                                                   2001US-0342810P.
2001US-0344468P.
                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0379876P
                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-JUN-2002; 2002US-0388180P
                                                                                                                                                                    19-SEP-2002; 2002WO-US029979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (INCY-) INCYTE GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-363161/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P-PSDB; ABR43232
                                                                                        WO2003025542-A2
                                                                                                                                                                                                                                                12-OCT-2001; 2
19-OCT-2001; 2
09-NOV-2001; 2
21-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                          21-SEP-2001;
05-OCT-2001;
                                                                                                                              27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disorders.
```

~

Wehrman T; Weng G; Wang J, Wang Z, Tang TY, Zhang J, Ren F, Xue AJ, Zhao QA, Zhou P, Ghosh M, Wang D, Ma Y, Asundi V, Haley-Vicente D, Drmanac RT;

WPI; 2003-371981/35 P-PSDB; ADC31731 New polynucleotide and polypeptide useful for diagnosing, preventing or treating conditions such as neurodegenerative diseases, anemias, platelet discrders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or

Claim 1; SEQ ID NO 842; 1185pp; English.

The invention relates to 971 novel human cDNA sequences (ADC29919-ADC3089) and the polypeptides they encode (ADC30890-ADC31860). The invention also relates to nucleic acid sequences over 99% identical with the novel human cDNAs. The invention additionally encompasses expression vectors and host cells comprising a nucleic acid of the invention; the crecombinant production of a polypeptide of the invention; an antibody adjainst a polypeptide of the invention; an antibody polynucleotides or polypeptides of the invention; and methods of invention further discloses methods of the invention. The amount of monitorating a medical condition; kits comprising polynucleotide probes of invention further discloses methods of peventing, treating or ampliorating a medical condition; kits comprising polynucleotide probes of invention further discloses methods of peventing, treating or ampliorating a medical condition; kits comprising polynucleotide probes and/or monoclonal antibodies for carrying out the methods of the invention or activity of the polynucleotide and/or polypeptide; and 767 contig sequences corresponding to the connected by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC33049). The nucleic acids and polypeptides of the invention are useful in diagnostics drug sequences or sessessing biodiversity, and in producing many other types of also used for treating diseases and other neurodegenerative diseases. Altheimer's disease and other neurodegenerative diseases, Altheimer's diseases and nother neurodegenerative diseases. Altheimer's diseases and nother neurodegenerative openage of the invention probes or primers, wounds, burns, ulcers, osteoporosis, anaemia, platelet disorders, w ftp.wipo.int/pub/published\_pct\_sequences.

Sequence 667 BP; 216 A; 147 C; 154 G; 150 T; 0 U; 0 Other;

667 135 0 0 0 Length: Matches: Conservative: Mismatches: Indels: Gaps: 9.55e-76 715.00 100.00% 100.00% Best Local Similarity: Percent Similarity: Alignment Scores: Query Match:

US-10-005-907-2 (1-135) x ADC30760 (1-667)

Н

> 셤 à d

à

- 40 LysGlyasnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 246 21
- 306 CAAGATCAAGATAAGAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT 365 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 41

g

ò

à

9

61 GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer 80

SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120 545 485 Human; mast cell; MC; antiallergic; antiinflammatory; antiasthmatic; vasotropic; dermatological; allergy; hypersensitivity; rhinitis; asthma; CAGITITAGAGAAAGGICAGAGACAGAATAIGCCCTICITAGGACTICIGITAGIAGGCCT 426 TCCCTGAGCTCCAATGATGATGAGCTATGAGAAACATTGACTCCCTCACAAGGAAAGTGAGA CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135 546 IGTICCIGCACCCATGAGCATGATATGAAGTIGTGTTTCCACAC 590 Human mast cell related gene MC1 SEQ ID NO 1. Location/Qualifiers ABN81319 standard; cDNA; 3762 BP /product= "MC1" 07-DEC-2001; 2001WO-US046180. 08-DEC-2000; 2000US-0251835P. 14-MAR-2001; 2001US-0275479P. 28-MAR-2001; 2001US-0279115P. 02-APR-2001; 2001US-0280143P. (first entry) ๙ 25. .432 /\*tag= WO200246389-A2 Homo sapiens 30-AUG-2002 13-JUN-2002 ABN81319; 366 101 486 121 gene; ss. RESULT 2 Key ABN81319 원 셤 à g ò

Novel isolated nucleic acids that are differentially expressed in mast cells in patients with allergic hypersensitivity, encoding proteins associated with mast cell regranulation and allergic hypersensitivity. P-PSDB; ABB77569.

Einstein R;

Nocka K, Pirozzi G, WPI; 2002-508560/54.

(UNIO ) UCB SA.

Claim 1; Page 95-97; 119pp; English.

The invention relates to isolated nucleic acid (ABN81319-ABN81324), corresponding to genes differentially expressed in mast cells following activation or in patients with allergic hypersensitivity disease, (I) that encodes proteins (ABB7756-ABB77575) (II) or a protein fragment of (II) if at least 6 amino acids. (II) is useful for identifying binding partners. (I) or (II) is useful for diagnosing or treating a disease state (e.g. allergic hypersensitivity, seasonal rhinitis, asthma, urticaria or atopic dermatitis or mastcoytosis) in a subject which involves determining the level of expression of (I) or (II). A computer system, comprising a database containing information identifying the expression level in a tissue or at least one mast cell of (I), is useful for presenting information to identify the relative expression level of (I). (II) is used as a marker to detect, diagnose or identify an allergic

Add37623 Human sec Add37623 Human sec Ada56130 Gene enco

Adq24942 Human sof Ade62022 Rat gene

Scoring table:

Sequence:

OM protein

Run on:

Minimum DB Maximum DB

Searched:

Database

```
Aav20445 Human C-t
Aas03303 Human Trk
Ab127495 Drosophil
Aas71153 DNA encod
Aas75467 DNA encod
Aas69553 DNA encod
Ad00884 Human hom
Ab21302 Human hom
Ad24514 Human kid
Ad45687 Human ova
Ab133112 Human ova
Ab133112 Human pro
Ab133112 Human pro
Ab133112 Human pro
Ab239958 Human pro
Aax60927 Human Pro
Aax50927 Human Pro
Aax70692 DNA encod
Aas70692 DNA encod
Aas70692 DNA encod
                                                                                                                                                                                                                                                                                                                        Add22543 Human sof
Aai60039 Human pol
Aax84690 CBCALD05
Abk47580 cDNA enco
                                                                                                                                                                                                                                                           Add17931 Human sof
Adi02719 Human cDN
Aca03930 cDNA down
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; diagnostic; drug screening; forensics; gene mapping; biodiversity assessment; Parkinson's disease; Alaheimer's disease; usuaddepencrative disease; anaemia; platelet disorder; wound; burns; ulcers; osteoporosis; autoimmune disease; cancer; molecular weight marker; food supplement; antiparkinsonian; nootropic; antinamemic; anticoagulant; thrombolytic; vulnerary; antitlex; antimosuppressive; antiinflammatory; cytostatic; gene therapy; chromosome 1; gene; ss.
                                                                                                                                                                                                                                                                                          Aai58253 F
Adq98460 E
Adb48220 N
                                                                                                                                                                                                                                                                                                                                                                              Ach04802 1
Acd44612 1
                                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human novel cDNA sequence, SEQ ID NO:842.
                                                                                                                                                                                                                                                             ADQ17931
ADI02719
ACA03930
                                                                                                                                                                                                                                                                                                     ADQ98460
ADB48220
ADQ22543
       ADC73578
ADD37623
ADA56130
                                                                                                                                                       ADF81540
ADL45687
                                                                              ABL27495
AAS71153
AAS75467
AAS69553
                                                                                                                                                                                                                                                                                                                                                AAX84690
ABK47580
                                      ADQ24942
                                                 ADE62022
                                                           AAV20445
AAA09303
                                                                                                                          AD000884
                                                                                                                                               ADQ24514
                                                                                                                                                                                     ADJ67693
                                                                                                                                                                                                          AAX06785
AAZ50927
                                                                                                                                                                                                                                        AAS70692
ACA90154
                                                                                                                                                                                                                                                                                                                                     AA160039
                                                                                                                                                                                                                                                                                                                                                                               ACH04802
                                                                                                                                                                                                                                                                                                                                                                                         ACD44612
                                                                                                                                    ABX71302
                                                                                                                                                                             ABL33112
                                                                                                                                                                                                  AAH99858
                                                                                                                                                                                                                                ABK32895
                                                                                                                                                                                                                                                                                            AAI58253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADC30760 standard; cDNA; 667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-SEP-2002; 2002WO-US030474
1892
1892
1892
1892
1892
3957
584
2301
2301
1824
654
                                                                                                     654
654
2862
3186
3186
3186
5261
651
1671
1671
1899
1912
7688
851
8491
                                                                                                                                                                                                                                                                                  8493
8503
8503
8503
8517
8517
402003029271-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                  8888888
9999999
744444
                                                                                                                          ADC30760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADC30760
        υ
                                                                                                                                                                                                                                                                                                                                     Command line parameters:
-MODEL=frame+ p2n.model.-DEV=xlh
-Q=/Cgn2_1/USPTO_spool/US10005907/runat_16112004_140457_6157/app_query.fasta_1.327
-Q=/Cgn2_1/USPTO_spool/US10005907/runat_16112004_140457_6157/app_query.fasta_1.327
-Q=/Cgn2_1/USPTO_spool/US10005907/runat_bastap.-SUFFIX=rng-MINMATCH=0.1 -LAOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MARIXIx-blosum62 -TRANS-human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE_pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL. -OUTFMT=pto -NORM-ext -HEAPSIZE=500 -MINLER=0 -MAXLEN=200000000
-USER=US10005907_GCGN 1 1 470 @runat_1611204_140457_6157 -NCPU=6 -ICFU=3
-NO MAAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPELOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN IMBEOUT=30 -THRABAS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Abn81319 Human mas
Acc59951 Human IRA
Abl99791 Human sec
Abx05108 Human nov
Aaz24890 Human sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Adc30760 Human nov
                                                                       November 18, 2004, 21:26:34; Search time 424 Seconds (without alignments) 1671.396 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                      1 MGNYLLRKLSCLGENQKKPK......svsRPCSCTHEHDYEVVFPH 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                            8269772
            GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd
                                                    using frame_plus_p2n model
                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                       4134886 segs, 2624710521 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADC30760
ABN81319
ACC59951
ABL99791
ABX05108
AAZ24890
                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                       BLOSUM62
Xgapop 10.0 , Ygapext (
Ygapop 10.0 , Ygapext (
Fgapop 6.0 , Fgapext Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geneseqn2001bs:*
geneseqn2002as:*
geneseqn2002bs:*
geneseqn2003as:*
geneseqn2003bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            geneseqn2003cs:*
geneseqn2003ds:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                geneseqn20048:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              geneseqn2001as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                geneseqn1980s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         geneseqn1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 geneseqn2000s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Geneseq_23Sep04:*
                                                                                                                                                                                                                                                                 seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 9 8 9 8 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length DB
                                                                                                                  US-10-005-907-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               667
3762
732
1643
775
                                                     nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23.7
22.2
22.8
20.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                715
715
169.5
159
149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                              Perfect score:
```

Human pol DNA encod Novel hum

Human sec Novel hum

Adi40373 Human pu

24-SEP-2001; 2001US-0324631P

(HYSE-) HYSEQ INC

```
g
                                                         ઠે
                                                                                           g
                                                                                                                                                      qq
                                                                                                                                                                                      ò
                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                          qq
                                                                                                                          \delta
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 64985, Application US/10437963

Sequence 64985, Application US/10437963

Publication No. US20040123343A1

GENERAL INFORMATION:

APPLICANT: La Rosa, Thomas J.

APPLICANT: Zhou, Yihua

APPLICANT: Cao, Yongwei

APPLICANT: Bunkharov, Andrey A.

APPLICANT: Barbazuk, Brad

APPLICANT: Barbazuk, Brad

APPLICANT: Li, Ping

TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

CURRENT FILING DATE: 2003-05-14

NUMBER OF SEQ ID NOS: 204966

SEQ ID NO 64985
                   121 ATGGAGAAAGAGGTGTCTGATTTCATCCAGGACAGTGAGACAAGAAAAAGTTTCAG 180
                                                                                                                                         :::||| ||| |||
181 CCTATGAACAAGATA-----GAGGGGAGCATACTACATGATGTGGTAGAGGTGGCTGGC 234
                                                                                                                                                                                                    -----ThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyr 110
                                                                                                                                                                                                                                                                                                                                                                  111 AlaLeuLeuArgThrSerValSerArgProCysSerCysThrHisGluHisAspTyrGlu 130
                                                                                                                                                                                                                                                                                                                                  355 CAGAAGGCTGAGGAGAAGCGAAAGCTAAAGGAGCTGGCTCAGAAGCAGGAAGAAGAAGAA 414
                                                                                                                                                                                                                                                                                                                                                                                                        ---GACTACAAG 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |||||||::::::
705 TTGGGAAAAGACAATGATGATCCAAAGAAGATTCAGAAACGGAGGTTGAAAGGAGGAA 764
PheGluArglysleuglnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsn 55
                                                                                                                                                                                                                                                    -- 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuGlyGluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGln 31
                                                            --AsnGlySerGlySerGluGluValCysTyrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2693
35
20
62
21
                                                                                                                                                                                  81 ------SerLeuSerSerAspAspAsp-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x US-10-437-963-64985 (1-2693)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Clone ID: PAT_MRT4530_66077C.1
                                                                                                                    71 VallleAsnHisIleProHisGlnArgSer-----
                                                                                                                                                                                                                                               ------GlyTyrGluAsnIleAspSerLeu--
                                                                                                                                                                                                                                                                                                                                                                                                  415 GCGCAGCAGGACCTGCGGTTGTGAGTCCTGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                               131 ValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                               460 GACAAGTATAGCCAT 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.373
90.50
39.86%
25.36%
                                                           56 GlnGluAsnGlu--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-437-963-64985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-437-963-64985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                         96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
9
                                                                               g
                                                                                                              à
                                                                                                                                                 g
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                임
 ò
                         g
                                                       à
                                                                                                                                                                                 ò
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P
```

```
996 GATTTGGAAGCACCAGTATACCAAGATAATGCCCAGGATGAAATTTCTAGCAAACTGATA 1055
                              825 GCATTICCTATAGAAAAATCGGTGGATGAAAAACTCACCTTTGAACAAGAAAAAG 884
                                                                                                                                                                                                                                       385 GTAGAAĠĠĊTĊTĠAAĠAAGAAGAAGGAACCAGTAAAAGAACAGAGTTATGATĠTĊGAGATG 944
                                                                                                                                                                                                                                                                                                                              94 SerieuThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeu 113
                                                                                            --- LyslysSerGlnGluValSerSerThrSerAsnGluAsnGluAsn 60
                                                                                                                                                                                         74 HislleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAsp 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       114 ArgThrSerValSerArgProCysSerCysThrHisGluHisAspTyrGluVal 131
--ArgLysLeuGlnAspGlnAsp---
32 GluMetThrThrPheGlu--
                                                                                            45
```

Search completed: November 19, 2004, 05:28:12 Job time : 1530 secs

```
----AAACCAAATAATACACAACGTTTC 5673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ::: :::::|||::: ||||||::: ::|||||::: ::: :::|||||::: :::|||::: :::|||::: :::|||::: :::||::::||:::: :::||:::::|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ::: |||:::||| :::||| |:::||| |:::||| :::||| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|| :::|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87 AspGlyTyrGluAsnileAspSerLeuThrArgLysValArgGlnPheArgGluArgSer 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   107 GluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCysSerCysThrHisGlu 126
                                                                                                                                                                                              6080 GAAAATACTAAAAATACGACTCAACTTCTTCCGCCTCGACAAAATACACTACACTAAA 6021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 GlniysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThr 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86
                                                                                                                                                                                                                                                                                                                                                                                                                  47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                          35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68 CysTyrThr---ValileAsnHislleProHisGlnArgSerSerLeuSerSerAsnAsp
                                                                                                                                                                                                                                                                                                                                       6020 AAACAAAATAACCCCGATAAAAAAAAAAAAATAAACAACCCTAACTCTCTCATACTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5960 TTTAAAAATCTAAAATCTAAAAACCCTTAAAATAACGAAAAAACTTAAAAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48 GlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                  CTHER INFORMATION: Description of Unknown Organism: KiflC nucleic COTHER INFORMATION: acid sequence US-10-261-175A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             651
39
22
51
53
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/10261175A

Publication No. US2004003822A1

GENERAL INFORMATION:
APPLICANT: DIETRICH, WILLIAM
APPLICANT: WATTERS, JAMES W.
TITLE OF INVENTION: ANTHRAX SUSCEPTIBILITY GENE
FILE REFERENCE: 56491(71250)
CURRENT APPLICATION NUMBER: US/10/261,175A
CURRENT APPLICATION NUMBER: 60/325,864
PRIOR APPLICATION NUMBER: 60/325,864
PRIOR FILING DATE: 2002-09-30
PRIOR FILING DATE: 2001-09-29
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PATENTIN VOY: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                             20 iyşiysGlyAşnProAspGluGluArgiyşArgGlnGlu-
                                                                US-10-005-907-2 (1-135) x US-10-311-455-1085 (1-7488)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-005-907-2 (1-135) x US-10-261-175A-9 (1-651)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5720 AAAACGCACCACCAACTCGAAAAA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             127 HisAspTyrGluValValPhe 133
                                                                                                                                            14 GluAsnGlnLysLys----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0514
90.50
36.97%
23.64%
12.66%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Unknown Organism
       15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-261-175A-9
                                                                                                                                                                                                                                                                                                                                                                                                                         36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Associated with the Immune System by Determ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 570 GAG------CAGGTGGAACACATCAGGGAGGAGTGTCTCAGCTCCGGCATGAGCTG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721 TCCATGAAGGATGAGCTGCTTCAGTTCTACACCAGCGCTGCGGAGGAG------

    LOCATION: 1, 2, 3, 4, 5, 6, 5250, 5251, 5252, 5253, 5254, 5255, 5256,
    LOCATION: 5257, 5259, 5260, 5261
    CTHER INFORMATION: n = A,T,C or G
US-09-814-353-19577

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x US-09-814-353-19577 (1-5261)
                                                                                                                                                                                                                                                                                        Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: chemically treated genomic US-10-311-455-1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-311-455-1085/C

Sequence 1085, Application US/10311455

Publication No. US20030143606A1

GENERAL INFORMATION:
APPLICANT: PIPENBROKCK, Christian
APPLICANT: PIPENBROKCK, Christian
APPLICANT: BERLIN, Kurt

TITLE OF INVENTION: Diagnosis of Diseases Asset
TITLE OF INVENTION: Diagnosis of Diseases Asset
TITLE OF INVENTION: Oytosine methylation
FILE REFERENCE: 5013.1014
CURRENT APPLICATION NUMBER: US/10/311,455
CURRENT FILING DATE: 2002-12-16
FRIOR APPLICATION NUMBER: DE 10032529.7
FRIOR PILING DATE: 2000-06-30
FRIOR APPLICATION NUMBER: DE 10043826.1
FRIOR PILING DATE: 2000-06-30
FRIOR APPLICATION NUMBER: DE 10043826.1
FRIOR PILING DATE: 2000-06-30

NUMBER: OF SEQ ID NOS: 2424

SENGTH AND ARREST 
                                                                                                                                                                                                                                                               Matches:
                                                                                                                                                                                                                       Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --- AGTGAGCCCGÁGTCCGTTTGCTCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.15
91.50
44.22%
19.73%
                                                                                                                                                                                                                    0.702
91.50
47.90%
26.89%
12.80%
                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
                                                                                                                                                                                                                                                                  Score.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

ø

```
TYPE: DNA; ORGANISM: Homo sapiens
US-10-342-887-1552
                                                                                                                                                                                            Best Logal Similarity:
                                                                                                                                                                         Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -09-814-353-19577
                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 19577
LENGTH: 5261
                                                                                                                                                                                                               Query Match:
DB:
              LENGIH:
                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 610 ATCGGCCAGTCGTTGTTGAAGAAGAACAAGACCCTAACCGAGAAGGAACGAGCTGCTGGAG 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     670 GAG------CAGGTGGAACACATCAGGAGGAGGTGTCTCAGCTCCGGCATGAGCTG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B11 GAGTCGTCCTCTCAGGAATTACTTTCATTTGGATTCTTTCAAAAGAAGCTGAAA 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1552, Application US/10342887;
Sequence 1552, Application US/10342887;
Publication No. US20040058340A1
Sequence 1552, Application US/10342887;
Publication No. US20040058340A1
APPLICANT: Dai, Hongyue
APPLICANT: Linsley, Peter S.
APPLICANT: Roberts, Christopher J.
APPLICANT: Noberts, Christopher J.
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van MUMBER: 60/298,918
PRIOR FILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: 60/380,710
PRIOR APPLICATION NUMBER: 10/172,118
PRIOR FILING DATE: 2002-06-14
PRIOR FILING DATE: 2002-06-14
NUMBER OF SEO ID NOS: 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-005-907-2 (1-135) x US-10-172-118-1552 (1-5109)
                                                                                                                                                                                                                                                                                                                                                                                             Indels:
CURRENT APPLICATION NUMBER: US/10/172,118
CURRENT FILING DATE: 2002-06-14
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 2699
LENGTH: 5109
                                                                                                                                                            ORGANISM: Homo sapiens
PUBLICATION: INFORMATION:
DATABASE ACCESSION NUMBER: NM 014965
DATABASE ENTRY DATE: 2001-06-18
                                                                                                                                                                                                                                                                                                        0.673
91.50
47.90%
26.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             871 GACCTTGAAGAG-----
                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                         TYPE: DNA
ORGANISM: HOMO
                                                                                                                                                                                                                                             US-10-172-118-1552
                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

```
670 GAG------CAGGTGGAACACATCAGGGAGGAGGAGTGTCTCCGGCATGAGCTG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---AGTGAGCCCGAGTCCGTTTGCTCAACC------CCGTTGAAGAGGAAT 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 510 ATCGGCCAGTCGTTGTTGAAGAAGAACAAGACCCTAACCGAGAGGAACGAGCTGCTGGAG 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81 SerLeuserserAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          811 GAGTCGTCCTCCTCAGCTCAGAATTACTTTTGATTTTGGATTCTCTTCAAAAGAAGCTGAAA 870
                                                                                                                                                                                                                                                                                                                                                                                                        1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 GlySerGlySerGluGluValCysTyrThrVallleAsnHislleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lie, John
APPLICANT: Lilia, Jamela
APPLICANT: Lilia, Jamela
APPLICANT: Lilia, Jamela
APPLICANT: Lilia, Jamela
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
FILE REFERENCE: MRI-006B
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/191,031
PRIOR FILING DATE: 2000-03-21
PRIOR FLING DATE: 2000-05-25
PRIOR PLICATION NUMBER: US 60/211,940
PRIOR PLICATION NUMBER: US 60/211,940
PRIOR PLICATION NUMBER: US 60/211,940
PRIOR FILING DATE: 2000-06-15
PRIOR PLICATION NUMBER: US 60/210,940
PRIOR FILING DATE: 2000-07-07
PRIOR FILING DATE: 2000-07-05
PRIOR FILING DATE: 2000-07-07
PRIOR FILING DATE: 2000-07-05
PRIOR FILING DATE: 2000-07-07
PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5109
32
25
45
                                                   Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                           US-10-005-907-2 (1-135) x US-10-342-887-1552 (1-5109)
              Length:
                                                                                                                                                                                           Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19577, Application US/09814353
Publication No. US20030165831A1
GENERAL INFORMATION:
0.673
91.50
47.90%
26.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Homo sapiens
```

g à d

ઠે

ò

```
81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                595 GAGTCCTCCTCAGCAGAATTACTTTCATTTGGATTCTCTTCAAAGAAGCTGAAA 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41 GlnAspGlnAspLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     454 GAG------CAGGTGGAACACATCAGGGAGGAGGTGTCTCAGCTCCGGCATGAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients FILE REFERENCE: 9301-175-999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          505 TCCATGAAGGATGAGCTGCTTCAGTTCTACACCGAGCGCTGCGGAGGAG-
                                                                                        US-10-26-929-22

US-10-26-929-22

Sequence 22, Application US/10263929

Sequence 22, Application US/10263929

Sublication No. US20040067535A1

GENERAL INFORMATION:

APPLICANT: Kim, Jaeseob

TITLE OF INVENTION: Alzheimer's Disease Linked Genes

FILE REFERENCE: LSD-07417

CURRENT APPLICATION NUMBER: US/10/263,929

CURRENT FILING DATE: 2002-10-03

NUMBER OF SEQ ID NOS: 213

SOFTWARE: PatentIn version 3.2

SEQ ID NO 22

LENGTH: 2862

TYPE: DNA
                               ---ArgGlnPheArgGluArgSerGluThrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-005-907-2 (1-135) x US-10-263-929-22 (1-2862)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sss ---AdragcccdadrccdrrrdcrcaAcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1552, Application US/10172118
Publication No. US20030224374A1
GENERAL INFORMATION:
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter
APPLICANT: Linsley, Peter
APPLICANT: Roberts, Chris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Van 't Veer, Laura
Van de Vijver, Marc
Bernards, Rene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91.50
47.90%
26.89%
12.80%
                                                                                                                                                                                                                                                                                                                                                                                                                       ) ORGANISM: Homo sapiens
US-10-263-929-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                100 ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-172-118-1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                      qq
                  à
                                                                 |||-:::|||
| ||| GAAGCCGTAGAATTTTTCCAGGATGTTTGCACTAAGCAAAAAGCTCAAGTTAAAACTTTG 1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ||||:::
| ATGAATTGTCACAAT----ACTCGAATAATGCAAGACACAGAAAAGGATGATAACAAT 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                571 AATGACGAATATGACAATTACGATGAACTGGTGGCCAAGTCATTGTTAAACCTCGGCAAA 630
991 TCATCACGGTCATCACACAAATGCCTTATGGCAAGAGGTAACAAAAGCATTCCATCCTCT 1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         337 GACÁÁTGACGAGCCAGGGGATGAGGACGAGGAGÁCGÁGAGGGGGGACCGGGAGGÁGGAG 396
                                                                                                                   97 ArgLysValArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSer 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 GluasnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMet 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34 ThrThrPheGluArgLysLeuGlnAspGlnAspLysSerGlnGluValSerSerThr 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66
                                     79 ArgSerSerLeuSerSerAsnAsp-----AspGlyTyrGluAsnIleAspSerLeuThr 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      397 GAGGAGATCGAGGAGGAGGATGACGATGACGAGGATGGAGGATGAGAGGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68 -----CysTyrThrVallleAsnHisIleProHisGlnArgSerSerLeuSerSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      86 AspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal--------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              54 SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluVal----------
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Asundi, Vinod
APPLICANT: Asundi, Vinod
APPLICANT: Ren, Feiyan
APPLICANT: Brinanc, Radoje T.
ITLE OF INVENTION: No. US20030219743A1e1 Nucleic Acids and
ITLE OF INVENTION: No. US20030219743A1e1 Nucleic Acids and
ITLE OF INVENTION: No. US20030219743A1e1
CURRENT APPLICATION NUMBER: US/10/115,831
CURRENT APPLICATION NUMBER: 09/667,298
PRIOR PILING DATE: 2000-09-22
PRIOR PILING DATE: 2000-09-22
PRIOR FILING DATE: 2000-05-18
NUMBER OF SEQ ID NOS: 178
SOFTWARE PL FL genes Version 2.0
                                                                                                                                                                                                                            117 ValSerArgProCysSerCysThrHisGluHisAspTyrGlu 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-005-907-2 (1-135) x US-10-115-831-54 (1-6324)
                                                                                                                                                                                                                                                                                                                  Sequence 54, Application US/10115831 Publication No. US20030219743A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38.60%
23.68%
12.87%
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: CDS
LOCATION: (1)..(3573)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 54 TENGTH: 6324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-115-831-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ծ
```

552

80

504

10-005-907- 3 710 17 770 830	0Y   54 SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThrValI1e 72	REBULT. 18-14732  (Sequence 11732 Application US/10425115  Publication No. USSO040214272A1  Sequence 11752 Application US/10425115  Publication No. USSO040214272A1  SEQUENCE 11752 ADMINISTRATION TO SERVE ADMINISTRATION TO SEQUENCE ADMINISTRATION TO SEQUENCE ADMINISTRATION TO SEQUENCE ADMINISTRATION NUMBER: US/10/425.115  CURRENT FILMS DATE: 2003-04-28  CURRENT PELICATION NUMBER: US/10/425.115  CURRENT PELICATION NUMBER: US/10/425.115  CURRENT APPLICATION NUMBER: US/10/425.115  CURRENT APPLICATION NUMBER: US/10/425.115  CURRENT APPLICATION NUMBER: US/10/425.115  CURRENT SEQUENCE: 2003-04-28  NUMBER: US/10-425-115-147532  Alignment Socres: Pred. No.: 22.00 Martches: 23  PEROTOR SOCRES: 0.15 Lay 1948 Mismatches: 67  OTHER INVORMATION: US/10/425.115  AND ARCHAELS TO SOCRES: 12.074 Mismatches: 12  AND ARCHAELS TO SOCRES: 12.074 Mismatches: 12  DB: 10-425-115-147532 (1-1941)  OY ARCHAELS AND SOCRES OF SOCRES
	34 77 77 133 133 133 133 133 133 133 133 1	197   AGGACCCAGGGGGGGGGGGGGGGGGGGGGGGGGGGGG

```
-----GluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGlu--- 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||||:::::||||||||:::::|
932 AATGAAATATATGATGAGAAACTCCTACTGGAGAAAACCCTGGCAGCAGCCTCCTGCAG 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---ArgSerGluThrGluTyrAlaLeuLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5 LeuleuArglysLeuSerCysleuGlyGluAsnGlnLysLysProLysLysGlyAsnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        572 criccracarrecretereceriógáasecaggageargededaggagagagagagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        45 LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65 GluGlu------ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
PRIOR FILING DATE: 1998-03-19
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 470
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 90
LENGTH: 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Nandabalan, Krishnan
APPLICANT: Schulz, Vincent P.
APPLICANT: Schulz, Vincent P.
APPLICANT: Yang, Meija
TITLE OF INVENTION: NIk1 PROTEIN AND NIk1 PROTEIN COMPLEXES
FILE REPERENCE: 15566-521 NIk1 protein complexes
CURRENT APPLICALION NUMBER: US/10/242,943
CURRENT FILING DATE: 2002-09-13
                                                                                                                                                                                                                                                  1892
36
21
62
30
                                                                                                                                                                                                                                                                                           Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                           US-10-005-907-2 (1-135) x US-10-653-595-90 (1-1892)
                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 992 crecceacacacacacirideregie 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81 ---SerLeuSerSerAsnAspAspGlyTyr--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           115 ThrSerValSerArgProCysSerCys 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US/09/167,206
PRIOR FILING DATE: 1998-10-06
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/10242943 Publication No. US20030087412A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                             98.00
38.26%
24.16%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                      ; ORGANISM: Homo sapiens
US-10-653-595-90
                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-242-943-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105
                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               104
                                                                                                                                                                                                                                                                                                                                                                                                             811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||:::::
932 aatgaaatatatgatgagaactcctactggagaaccaaaaccctggcagcctcctgcag 991
                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                             45 LysLysSerGinGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer 64
                                                                                                                                                                                                                                                                                                                                                                         25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65 GluGlu------ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----GluAsnileAspSerLeuThrArgLysValArgGlnPheArgGlu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    872 CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAATAGATGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------ArgSerGluThrGluTyrAlaLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---SerLeuSerSerAsnAspAspGlyTyr-------
                                                                                                                                                                                                                                                                                    5 LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             752 AAGGÁGGGACGGGAGGCTGTGTCTCAGCTGCAGACTCAGAGCCCCAAGTTTCACTCT
                                                                                      1892
36
21
21
62
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4

US-10-653-595-90

Sequence 90, Application US/10653595

Publication No. US20040048304A1

GENERAL INFORMATION:
APPLICANT: Ruben et. al.
TITLE OF INVENTION: 95 Human secreted proteins
FILE REFERENCE: PZ027PLCI
CURRENT FILING DATE: 2003-09-03

PRIOR APPLICATION NUMBER: US/10/653,595

CURRENT FILING DATE: 1999-09-17

PRIOR APPLICATION NUMBER: PCT/US99/05804

PRIOR PILING DATE: 1999-03-19

PRIOR FILING DATE: 1999-03-19

PRIOR PLING DATE: 1998-03-19

PRIOR APPLICATION NUMBER: 60/078,566

PRIOR PLING DATE: 1998-03-19

PRIOR APPLICATION NUMBER: 60/078,576

PRIOR PILING DATE: 1998-03-19

PRIOR PILING DATE: 1998-03-19

PRIOR FILING DATE: 1998-03-19

PRIOR PILING DATE: 1998-03-19

PRIOR FILING DATE: 1998-03-19

PRIOR FILING DATE: 1998-04-01

PRIOR FILING DATE: 1998-04-01
                                                                                                                                  Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                           US-10-005-907-2 (1-135) x US-09-397-945-90 (1-1892)
                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        992 CIGCCCCACACAGAGCCITGCIGGIGC 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               115 ThrSerValSerArgProCysSerCys 123
                                                                                                                                                                                                      Gaps:
                                                                                                             98.00
38.26%
24.16%
13.71%
                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                         Alignment Scores:
                             US-09-397-945-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105
                                                                                                                                                                                  Query Match:
DB:
                                                                                                  No.
```

931

811

68

80

64

44

24

à g

à g ò 임 g ò g  $\dot{\delta}$ g ò 셤 8

ò

```
355 AGGAAGAGGATGCTTCGCATGTGGGGAGAAGGCCCACTTCAGGGACAACTGTCCAAAT 414
                                                                                                                                                                                    415 ATGGCCAAACCCAAAAAGGAGAGGCAAAGGCAAGACGCTAACAAGTGTTAGAACTTGG 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97 ArglysvalArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSer 116
                                                                                                                                                                                                                                                          335 TCAİCACGGİCATCACACAAAİGCCTTATGGCAAGAGGTAACAAAAGCAİİCCATCCTCG 594
                                                                                                                                                                                                                                                                                                                                                                                                                 655 GAAGCCGTAGAATTTTTCCAGGATGTCTGCACCAAGCAAAAAGCTCAACTTAAAACTTTG 714
                                                                                                                                               21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                            41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                          61 GlySerGlySerGluGluValCysTyrThrVallleAsnHis-----IleProHisGln 78
                                                                                                                                                                                                                                                                                                                                                                                      79 ArgSerSerLeuSerSerAsnAsp-----AspGlyTyrGluAsnIleAspSerLeuThr 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              117 ValSerArgProCysSerCysThrHisGluHisAspTyrGluValVal 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-005-907-2 (1-135) x US-10-425-115-147529 (1-1173)
                                                                   7 ArglysLeuSerCysLeuGlyGluAsnGlnLysLys----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 **APELICANT: Human Genome Sciences, Inc. et al. TITLE OF INVENTION: 95 Human secreted proteins CURRENT APPLICATION WHERER: US/09/397,945 CURRENT APPLICATION WUMBER: US/09/397,945 PRIOR APPLICATION WUMBER: US/09/397,945 PRIOR PILING DATE: 1999-09-17 PRIOR APPLICATION WUMBER: 60/078,566 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1998-03-19 PRIOR PILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 90, Application US/09397945
Publication No. US20030065139A1
GENERAL INFORMATION:
                                                                                                g
                                                                                                                                               à
                                                                                                                                                                                g
                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGITIAGAGAAAGGICAGAGACAGAAIAIGCCCIICTIAGAACIICTGIIAGIAGGCCI 384
                                                                                                                                                                                                                                                                                                                  25 ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAGAAGCCCAAG 84
                                                                                                                                                                                                                                                                                                                                                                         21 lysglyasnproaspglugluarglysargglnglumetThrThrPhegluarglysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                             1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3762
135
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1173
33
24
67
12
                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                  US-10-005-907-2 (1-135) x US-10-005-907-1 (1-3762)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Clone ID: MRT4577_66073C.1
                                                                                                                                                                                                 Indels:
                                                                                                                   9e-83
715.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98.00
41.91%
24.26%
13.71%
                ; LOCATION: (25)..(432); OTHER INFORMATION:
US-10-005-907-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
US-10-425-115-147529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-425-115-147529
NAME/KEY: CDS
                                                                                            Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

```
Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
US-10-005-907-1
                                                                   SEQ ID NO 1
                       Score
                                                                                                                                                                  Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  **MODEL=frame+ p2n.model - DEW=xlh
-MODEL=frame+ p2n.model - DEW=xlh
-MODEL=frame+ p2n.model - DEW=xlh
-MODEL=frame+ p2n.model - DEW=xlh
-MODEL=frame+ p2n.model - DEW=xlh
-DE=Published Applications NA - OFMT=faatap - SUFFTX=rnpb - MINNATCH=0.1
-LOOPEL=0 - LOOPEXT=0 - UNITS=bits - START=1 - END=-1 - MATRIX=blosum62
-LOOPEXT=0 - LOOPEXT=- DOCALIGN=200 - THR SCORE=pct - THR MAX=100
-THR MIN=0 - ALIGN=15 - MODE=LOCAL - OUTFWT=pto - NORM=ext - HEAPSIZE=500 - MINLEN-0
-MAXIEN=200000000 - USRR=US10005907 - GCGN 1 1 480 - Grunat | LBAPSIZE=500 - MINLEN-0
-NORD=6 - ICPU=3 - NO MAPP - LARGEQUERY - NEG SCORE=0 - WAIT - DSPELOGE=100 -
-LONGIGG - DEW TINEOUT=120 - WARN TIMEOUT=30 - THRRADS=1 - XGAPPRT=0.5
-FGAPOP=6 - FGAPERT=7 - YGAPOP=10 - YGAPEXT=0.5 - DELOP=6 - DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                      (without alignments)
478.354 Million cell updates/sec
                                                                                                                                                                                                                                                                            US-10-005-907-2
715
1 MGNYLLRKLSCLGENQKKPK......SVSRPCSCTHEHDYEVVFPH 135
                                                                                                                                                                          November 19, 2004, 02:51:09 ; Search time 1525 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Published Applications NA:*

1. /cgn2_6/ptodata/2/pubpna/USO7_PUBCOWB.seq:*
2. /cgn2_6/ptodata/2/pubpna/USO7_NEW PUB.seq:*
3. /cgn2_6/ptodata/2/pubpna/USO6_NEW PUB.seq:*
4. /cgn2_6/ptodata/2/pubpna/USO6_PUBCOWB.seq:*
5. /cgn2_6/ptodata/2/pubpna/USO7_NEW PUB.seq:*
6. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
7. cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
8. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
9. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
10. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
                            GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                              nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3627888 seqs, 2701811610 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                        Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                   ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database:
                                                                                                                                   OM protein
                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                    Run on:
```

```
Sequence 1, Application US/10005907
Sequence 1, Application Wo. US20030166881A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Union Chimique Belge, S.A.
APPLICANT: No. US20030166881Alka, Karl
APPLICANT: Pirozzi, Gregory
APPLICANT: Einstein, Richard
TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST TITLE OF INVENTION: ACTIVATION
FILE REFERENCE: 053529-5005
CURRENT APPLICATION NUMBER: US/10/005,907
CURRENT FILING DATE: 2001-12-07
NUMBER OF SEQ ID NOS: 13
SOGTWARRE: Patentin version 3.1
                                                                                                                                                                              Sequence 54, Appl
Sequence 22, Appl
Sequence 1552, Appl
Sequence 1557, Appl
Sequence 1085, Appl
Sequence 64985, Appli
Sequence 64985, Appli
Sequence 10372, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19617, A
18802, A
18720, A
83303, A
147531,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73, Appl
576, App
576, App
Sequence 1, Appli
Sequence 147529,
                                                                               Sequence 90, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 112896,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19622,
                                                                                                                                                                                                                                                                                                                                                                                                                           10372
                                                                                                             Sequence 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                  Sequence
                                                                                                                                                                Sequence
  US-10-005-907-1
US-10-005-907-1
US-10-425-115-147529
US-10-425-115-147529
US-10-653-595-90
US-10-242-943-3
US-10-424-193-8569
US-10-424-193-8569
US-10-424-193-8569
US-10-424-193-1957
US-10-172-118-1552
US-10-172-118-1552
US-10-172-118-1552
US-10-26-115-631-1957
US-10-26-115-631-1957
US-10-26-115-631-1957
US-10-26-1175A-9
US-10-26-1175A-9
US-10-26-1175A-9
US-10-26-1175A-9
US-10-26-118-631
US-10-26-118-631
US-10-027-62-130
US-10-17-722-130
US-10-17-96-118-19617
US-10-425-115-19617
US-10-437-963-18802
US-10-437-963-18802
US-10-437-963-18802
US-10-437-963-1851
US-10-005-115-147531
US-10-007-805-576
US-10-447-593-41655
US-10-451-533-724
US-10-415-134-3
                                111892
12892
12892
11992
11992
11993
11992
11173
11173
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
1071
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3873
81440
123192
```

FEATURE:

SUMMARIES